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REFERENCE

Fort Wayne Medical Journal-Magazine

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No. 1

EDITORIALS

Criticisms Pertaining to the Schmoll Case in California.

Dr. Porter Answer the Attorney's Rejoinder

SAN FRANCISCO, Dec. 21, 1904.

Fort Wayne Medical Journal Magazine, Ft. Wayne, Ind.

GENTLEMEN:—I note your editorial published in the September number of your Journal, criticising an expression of opinion on the subject of the enforcement of the medical laws. Your editorial is signed "M. F. P." which, I suppose, are the

initials of Dr. Miles F. Porter, whose name appears in the editorial staff of your Journal I referred your criticisms to the Attorney of the Board of Examiners of this state for an official opinion, which opinion I have just received.

As the matter is of considerable importance, and as added weight may be given to it by virtue of Dr. Porter's position as a high official in the A. M. A., may I ask you to kindly publish the enclosed written opinion on this point furnished by Mr. Wm. C. Tait, Attorney for the Board of Examiners?

Trusting that you will find room for this communication at no distant date, and thanking you in advance for this courtesy, I beg to remain, Respectfully yours,

PHILIP MILLS JONES,
Secretary Medical Society of the State of California.

William C. Tait, Atty-at-Law, 530 California St., Rooms 15-16.

SAN FRANCISCO, CAL., Dec. 20, 1904.

Philip Mills Jones, M. D., Editor California State Journal of Medicine, Y. M. C. A. Building, San Francisco.

DEAR DOCTOR:—In reply to your request for an opinion as to the legal merits of the argument of Dr. Miles F. Porter in his editorial—"Value of Big Game"—in the September, 1904 number of the *Fort Wayne Medical Journal-Magazine*, permit me to state that, in my opinion, it is none other than the time-honored plea of the illegal practitioner, I was about to say of the quack, but that uncertain and elastic term is unknown to our state medical laws. The law knows only licensed and unlicensed practitioners. Illegal practice, not quackery, is the crime. The accused is not charged with either quackery or malpractice, but only with illegal practice. In the case of a defendant charged with illegal practice of medicine, whenever the practice of medicine is admitted, the issue is, precisely as stated by the *California State Journal of Medicine* "has this man who is practicing medicine procured a license to do so?" I note that Dr. Porter assumes that Dr. Schmoll was practicing.

All the illegal practitioners I have ever heard tried, whether European, American or Chinese M. D's., Quaker doctors, or otherwise, advanced this same plea of "doctor's monopoly, no harm, but benefit, to the people." All of them appealed to "the wise judgment and common sense" of the court or jury. All of them put the law itself, rather than the accused, upon

trial; all of them in effect asked the court to overrule the legislature, precisely as does Dr. Porter in his editorial on the Schmoll case.

The right to practice medicine is, as every physician should know by this time, a right which must be obtained from the state. It follows, then, that the state license or certificate, is the only legal evidence of the right, as well as of the fitness, of any particular individual to practice. Shall a court accept the invitation of a county medical society to an unlicensed practitioner to read a paper before it as the equivalent of the state certificate? Shall it accept the certificate of the *California State Journal of Medicine*, or that of the *Fort Wayne Medical Journal-Magazine*, or that of the professional brethren of the accused? Who can legally certify but the state itself, through its agency, the Board of Medical Examiners? Dr. Porter makes the court and the judge the board of examiners. But upon what theory, and according to what procedure, shall the court proceed to determine the question of the fitness of the accused to practice? Will the court conduct a medical examination, or will it judge the defendant by his works? The result of such an interpretation of medical legislation is simply anarchy.

What harm, says one judge, can come to the people from an M. D.? Have not the learned faculty of his alma mater certified to his fitness, and are they not better fitted to so certify than the examining board, and can harm come to the people from such a man?

What harm, says another judge, can possibly come to the people from a Chinese practitioner, who graduated from a Hong-kong medical school, holds the certificate of the Chinese Minister that he is the direct descendant of the Chinese Esculapius, a very able and estimable gentleman, and who prescribes only herbs and a diet? Are the services of such a man not a distinct benefit to that numerous class of persons who, as Moliere would say, are sick from medicine? Besides, how can he satisfy the requirements of a medical law that provides only for the admission to practice of allopaths, homœopaths and eclectics? Should the people be deprived of the benefit of the services of those who practice medicine, but prescribe no drugs? Are not potent drugs and the knife alone harmful in the hands of unlicensed persons, as some of our courts have held?

Taking Dr. Porter's own State of Indiana as an example, we might ask what harm can come to the people of that state from

the graduates of the Fort Wayne College of Medicine after January, 1905? Why does Indiana subject them to an examination after that date, and why does the medical law, passed by the medical profession, and designed to protect the people from quackery, provide that no professor or teacher of a medical school shall sit upon the State Board of Registration and Examination? Why does Germany subject the graduates of her state institutions to a *staatsexamen*? These, and like questions, are of no concern to the courts; they are left to the "wise judgment and common sense" of the legislature. The court must respect the statute so long as it is constitutional, and it must execute it as the will of the people. The law is no respecter of persons. The courts sometimes make distinctions of persons, and substitute their judgment for that of the legislature. That is one reason why quackery flourishes like the green-bay tree, as every board of examiners knows.

(Signed)

Very respectfully yours,

WILLIAM C. TAIT,

Atty. for Board of Medical Examiners, State of California.

For the benefit of those who did not read the editorial to which the above is a rejoinder, I will state the case briefly: Dr. Schmoll, a man of unquestioned ability and integrity, was invited by the San Francisco Medical Society to read a paper before it and to conduct a clinic. He was not a licensed practitioner in California, and was therefore arrested and convicted but the case was reopened and he was discharged. The editor of the *California State Journal of Medicine* praised the first finding of the court in this case and adversely criticised the second finding. My editorial criticised adversely the position taken by the editor of the *California State Journal* and gave the reasons upon which my opinion was based. Mr. Tait says "I note that Dr. Porter assumes that Dr. Schmoll was practicing." I assumed no such thing. On the contrary I assumed that he was not practicing according to a wise interpretation of the law, and inasmuch as the final decision of the Board of Examiners is in accord with my opinion, and that said decision meets with the hearty approbation of many of the best members of the profession in California and other states, I feel that further comment is unnecessary, and will close with a clipping from my editorial which called forth Mr. Tait's rejoinder.—"For the honor of the profession in general and the California contin-

gent in particular, it is well that there were among its members those possessed of sufficient wisdom and courage to have the case reopened and judged upon its merits, which is to say in the best interests of the profession and those who look to them for relief from suffering and disease. Law should be interpreted with wisdom and discrimination, with the best interest of the community ever in view.” M. F. P.

The Anti-Spitting Ordinance.

Just at the present time it is popular for municipalities to pass anti-spitting ordinances making it a punishable offense for any person to spit in a public conveyance, public building or on a sidewalk of a public highway. Fort Wayne, with commendable enterprise, has followed the fashion and now has an anti-spitting ordinance.

We are in hearty sympathy with any movement which has as its object the improvement of public health, hygiene or sanitation, and we endorse the action of the city council in passing the anti-spitting ordinance, but we confess that we believe that the ordinance will very soon keep company with a large number of other measures passed by the city during a spasm of reform and never enforced. There is not the slightest question of doubt but that the anti-spitting ordinance if enforced would result in immeasurable good, and it would be welcomed by all sensible people if it accomplished no other purpose than put an end to the filthy and disgusting habit of spitting in public places; but as a matter of fact, sentiment is not strong enough as yet to bring about even a feeble enforcement of the measure.

Primarily the ordinance was advocated and passed in the interest of the suppression of the spread of tuberculosis. This is a step in the right direction, but the medical profession, which was the chief champion of the measure, could accomplish more for the present if it undertook to educate the people as to the necessity of early diagnosis of tuberculosis and the essential requirements of every consumptive if the spread of his disease to others is to be prevented or limited.

What the people need is more education and not more laws. No law is effective until public sentiment in general is in favor of the provisions of the law, and to pass the law before the people are educated as to the value of the law and its provisions is to pass a law that will be inoperative.

Probably not one twentieth of the population of the city of Fort Wayne or any other city knows that the spit from a person suffering from advanced pulmonary tuberculosis contains the germs of the disease which may live indefinitely under certain conditions, only to produce the disease in someone else if transmitted to suitable soil. The idea, therefore, that spitting in public places must be legally prohibited because it carries with it the possibility of transmitting disease, will meet with encouragement only after the people have been taught that diseases are so transmitted. At present the enforcement of the act will depend upon the verdict of the mass of people as to whether spitting in public places is sufficiently filthy to warrant prohibition by law. Unfortunately, sentiment in this direction is not very strong, or otherwise some such ordinance would have been passed by many cities long before the contagiousness of expectoration was recognized.

We approve the principle involved in the anti-spitting ordinance, but believe more could be accomplished by turning the energy in another direction.

A. E. B. JR.

Our Friends and Supporters.

With the beginning of a new year we feel warranted in calling attention to the debt we owe our friends and supporters—our subscribers and advertisers—without whom it would not have been possible for this periodical to have existed for so many years, and without whom it would be impossible for a continuation of existence which at this writing seems so pregnant with possibilities of continued success. The editing and publishing of a medical journal is always a task of considerable magnitude, and the work is all the more arduous if, as is generally the case, and is the case with this journal, the editors and managers are medical men actively engaged in the practice of their profession. To continue the undertaking year after year, always with limited time for such duties, requires some thing more than love of the work and hope for the future, for the novelty of being an editor—if there is novelty in the position—is soon over, and enthusiasm and effort soon dies if those necessary stimuli—subscribers and advertisers—do not come to the rescue and by continued and increasing support cause the enterprise to live and grow.

In beginning this twenty-fifth year of publication we look back upon the ten years that the present editorial staff has

been connected with the periodical, with feelings of both regret and pleasure. Regret, that we have not had the time or ability, or both, to do better editorial work; pleasure, that in doing as well as we have we have had the continued and increasing support of subscribers and advertisers, which is the surest indication that editorial effort is in some measure appreciated. While we admit love for the work and a desire to give it our best attention even in the face of limited opportunities, under any circumstances, yet it is the substantial support of readers and advertisers which stimulates the enthusiasm and keeps alive endeavor. We feel particularly grateful therefore for the continued evidences of appreciation which have been given us with the beginning of a new year., and in the acceptance of which we undertake the obligation of trying to make the *Journal-Magazine* better than ever before.

We recognize the fact that it is possible if not probable that some others would under similar circumstances produce a better medical journal than we do, but we also recognize the fact that it is possible for us to produce a better medical journal in the future than we have in the past, and in resolving to do so we are promising to cancel the obligation to our friends and supporters—our subscribers and advertisers—which we have incurred by the acceptance of their moral and financial aid. With our promise to use our best endeavors to improve the quality and standing of the *Journal-Magazine* we desire to solicit encouragement and support from those who may heretofore have withheld it. We are encouraged by renewal of support, but we are more encouraged by new and additional support, so we hope our readers, new and old, will not forget their subscriptions in bestowing appreciation upon us.

We also desire to say a word for our advertisers, for they deserve favorable consideration. They make it possible, through the money paid us for advertising, for us to give more to our readers than we could if we depended upon subscriptions alone, and it is only through a return of patronage from our readers that advertisers are induced to continue advertising with us. In their interest, which is secondarily our interest, we therefore ask for a consideration of their claims as set forth in their announcements in this and other numbers

Finally, we wish to call attention to the fact that the interests of subscribers, advertisers and editors are interdependent, and

the full measure of success for one necessitates a recognition of this mutual interest and an effort to reciprocate in the bestowal of favors. The editors of the *Journal-Magazine* will endeavor to do their part in giving a *quid pro quo*. They hope their advertisers and subscribers will do likewise. A. E. B. JR.

Fort Wayne Medical Society.

It is with considerable pleasure that we refer to the very creditable work of the Fort Wayne Medical Society for the year 1904. For several years interest in medical society work has been growing in the city, but never before has it reached such a state of enthusiasm and effective effort as at present. With an increase of membership to nearly one hundred has also come an increase in the amount and character of scientific work done. The meetings, held every two weeks and occasionally oftener, have invariably had a representative attendance of from thirty to fifty, and at no meeting for the year has the program been one meriting anything but commendation. Aside from the increased quality of papers presented, perhaps the most notable feature of the programs for the year has been the large number of cases, reports and clinics offered. This feature has proven one of the most interesting and instructive of the year's work, and has probably led to more practical benefit than any other part of the program. The four "guest nights" of the year, when eminent medical men from other cities have been specially invited to address the society, have also proved to be valuable features of a highly profitable year's work.

We desire to compliment the program committee upon having prepared and systematically arranged such an interesting list of subjects as appear on the official program for the year 1905. Judging from the experience of the past year we may reasonably expect that the program will be carried out in its entirety, and in a manner highly creditable to the society. We want to suggest, however, that the presentation of case reports and clinics be made even more a feature this year than it was last. There is any amount of interesting clinical material among the poor of the city which could and should be properly utilized in the advancement of medical science, and in addition to using such material for clinics in connection with the Fort Wayne College of Medicine, it should also be used as

clinics for the Fort Wayne Medical Society. If every member of the society who is called upon to render services to the pauper or indigent poor of the city will make it a point to take the interesting cases from among this class before the Fort Wayne Medical Society, when such is possible, the clinical features of every meeting will be an interesting and profitable addition to the program. The society will then become a post graduate school which every physician of the city and surrounding country will want to regularly attend.

The very efficient secretary of the society has during the past year furnished very complete reports of all meetings of the society for publication in this journal, which is the official organ of the society. We shall continue the publication of the society reports and announcements, and believe that the department so devoted will prove interesting and profitable to our readers.

A. E. B., JR.

Indiana's Governor and Governor-Elect.

The retirement of Governor Durbin to private life will not bring forth many expressions of regret from citizens of Indiana who live outside of the influence of the political ring which he was instrumental in creating and partially controlling, and the reputable members of the medical profession will in general be pleased to see the end of a term of service which, so far as we are able to determine, presents no feature pertaining to the high aims and objects of the medical profession as a class, which can be unhesitatingly approved. If Gov. Durbin during his term of office had done nothing else which might be considered not only objectionable but contrary to the best interests of the people of Indiana, his spiteful attempt to remove Dr. J. N. Hurty (one of the most capable and efficient health officers in the United States) from the Indiana State Board of Health, and his continued opposition to the work of the Board of Health, would be sufficient to merit condemnation from the medical profession and all thinking people who have the best interests of the State at heart. His refusal to listen to the modest request of the medical profession that the members of the Indiana State Board of Medical Registration and Examination be appointed from a list of eligible physicians who had the recommendation of the several state medical societies representing the various schools of medicine, was another act not in accord-

ance with justice or reason, and has been the means of giving us a board not entirely representative and one that has not worked for the proper and just interpretation and enforcement of the medical law which brought the board into existence.

The Governor-Elect, Hon. J. Frank Hanley, assumes the duties of office bearing the cordial good will and support of a very large proportion of the seven thousand physicians of Indiana. He goes into office with the reputation of one having inherent tendencies to do the right thing under any and all circumstances, and with a judgment based upon careful consideration of the facts before him. We believe it is not too much to expect of him favorable consideration of the requests of the medical profession, which are always and have ever been in the interests of the community at large. In the advocacy of better laws relating to public health, sanitation, food inspection, the examination of applicants for the practice of medicine, and many allied subjects, the medical profession is exhibiting the most unselfish desire for benefits of immeasurable value to the people as a whole, and in the request for proper appointments on the boards that will have to do with the interpretation and enforcement of such laws the medical profession asks for that which is in line with the highest efficiency without regard to politics or thought of personal gain. We have every reason for believing that Governor-Elect Hanley will, in the interests of the highest efficiency, make his medical appointments from among the best, and the medical profession as a whole is much more competent than the politicians to advise him as to those best qualified.

The present Board of Health is a credit to the State, and the medical profession is not only proud of it but would be willing to endorse its members for reappointment. Through the Board of Health—and antagonistic to the wishes of Governor Durbin—Dr. Hurty, everywhere recognized as one of the most capable, energetic and in every way efficient health officers, was retained at the head of public health affairs in Indiana. The Board of Medical Registration and Examination, on the other hand, is not a representative board and has not nor could not secure endorsement from the medical profession as a body.

The existing board as a whole may have, in intent, fulfilled the duties of office fairly and honestly, and probably to the best of their ability, but in reality the actions of the board have not been in keeping with fairness or justice, or the high ideals which

should influence such a body of men. Appointments on this board should come only from such men as are representative of the intelligence and high standing of the medical profession, and who are capable and desirous of fairly and honestly interpreting and enforcing the provisions of the medical law. There are many eligible medical men in the state who would do credit to the positions on the board, and it was with a view to having selections made from such a class that the medical societies of Indiana unanimously requested that the governor make appointments from a list of names of men having the endorsement of the medical societies, a request that was entirely ignored. We hope for better things from Governor-Elect Hanly, and we believe his broad-minded consideration of the subject will warrant him in listening to the suggestions offered, and granting the requests.

A. E. B. JR.

Dr. J. H. Musser.

The alumni of the University of Pennsylvania residing in Indiana organized the "Indiana Alumni Society" and invited Dr. John H. Musser, clinical professor of medicine in the university, to be present at its first annual banquet, which was held December 6th, 1904, at Indianapolis. The Marion County Medical Society also entertained Dr. Musser in the evening from 8 to 11, and were in turn entertained by him with a very excellent paper on arterio-sclerosis. From 4 to 6 of the same afternoon Dr. Musser held a clinic at the city hospital in the presence of about 200 students and 100 physicians. All who were privileged to listen to this remarkable exhibit of clear, rapid reasoning and exhaustive knowledge of disease, are loud in their praise.

The profession of Fort Wayne hope to be able to induce Dr. Musser to accept an invitation to address the Fort Wayne Medical Society at some not distant date. Though not so large numerically as some other organizations, it prides itself on doing good work and being able to appreciate the good work of others.

B. VAN S.

The Registration of Nurses.

The Indiana State Nurses' Association has prepared a bill to be presented at the present session of the Indiana State Legislature, to establish a uniform standard of education, fitness and ability for the practice of the profession of nursing in the State of Indiana. The bill provides for qualifications for registering without examination prior to January 1st, 1906, and after June 1st, 1908, requires a state examination of all applicants.

This is a step in the right direction and we earnestly hope that the bill will become a law before adjournment of the present session of the legislature. As stated in the circular to the nurses of the state:—"Nursing is a profession requiring a high degree of ability and training; in view of the responsibility of the duties of the graduate nurse, it would appear to be as essential on general principles that the qualifications of the nurse should be determined and fixed by registration as the qualifications of the physician, pharmacist or dentist should be fixed by law."

A. E. B. JR.

Illinois After the Substitutors.

The Illinois State Board of Pharmacy is after the druggist who does not use pure drugs in putting up his prescriptions.

Out of 139 decoy prescriptions sent by the Board of Pharmacy to Chicago druggists to be filled, twenty-three contained no trace of the drug called for, sixty-six were 80 per cent. impure, ten were 20 per cent. impure, nine were 10 per cent. impure, and only thirty-one were pure.

As a result the State Board of Illinois will prosecute 100 druggists for selling impure drugs, and we hope a conviction will be secured in every instance. The druggist who substitutes is as dishonest as the man who steals a purse, and the punishment should be no less than that given the thief.

A. E. B. JR.

ORIGINAL ARTICLES

No paper published or to be published elsewhere as original
will be accepted in this department.

*Hernia**

By DR. E. H. GRISWOLD, Peru, Ind.

It is not purposed in this paper to enter into the discussion of the whole subject of hernia, as may be inferred from the title, but to deal more especially with the etiology of hernia, the predisposing and existing causes, with especial reference to trauma as an exciting or direct cause both from a scientific and medico-legal aspect. It is to solicit your interest in a discussion of this phase of the subject, so that we as corporation surgeons may stand upon a more common ground in our opinions as to the relative influence of trauma being a direct causative factor in the production of hernia.

In looking up the various authorities we find that nearly all are practically agreed upon the causative factors, and to judge from such a large concurrence of opinions, it would seem heresy to question them.

AMERICAN TEXT BOOK OF SURGERY:—Hernia. More frequent in men than in women, majority before middle age, and the largest number (Kingdon), during first ten years of life; due to non-closure of the process of peritoneum which is carried down with the testicle. That 34% are due to heredity. That occupation, abnormally long messenteries, child bearing in stout women, bronchitis, whooping cough, stricture, constipation, etc., by causing violent prolonged strain of abdominal muscles, favors production of hernia. Also relaxed tissue in old people predispose to hernia.

WYETH:—Hernia may be congenital or acquired. Congenital results from patulous condition of peritoneum which is carried down with descent of testicle. Acquired is caused by pressure of intestine and omentum from gravity and muscular effort combined. Umbilical hernia may be congenital or acquired. When congenital is due to patulous omphalo-mesenteric duct.

* Read at meeting of Wabash R. R. Surgeons at St. Louis, Nov. 10, 1904.

Ventral hernia when congenital is due to failure in development of the muscle of the abdomen and usually met with along the line of the linea-alba above the umbilicus. The acquired may occur at any point, due to accidental or surgical wounds of the muscles and fascia. Femoral hernia is always acquired. Diaphragmatic is usually due to wounds or rupture and may be from congenital defect of muscle.

PARKS:—Congenital herniae are caused by development defect in the peritoneum or in the abdominal wall. Chief cause of acquired hernia is increased abdominal pressure, constant or intermittent, which increased pressure may be due to occupation, pregnancy and disease. Simple weakness of abdominal walls, trauma, and surgical operations contribute more or less directly to the production of hernia. Trauma, except as a cause of strain, rarely causes hernia. Hernia tumors that suddenly appear after violent exertion, have doubtless already made their way through the inguinal canal to the external ring.

DENNIS:—Heredity a predisposing cause. Records of London Truss Society show 25% give family history of rupture, and when both parents have hernia the per cent. is increased. One hundred and seventy-five per 1,000 males and 91 6-10 per 1,000 females are affected during first year of life. Occupation, parturition, rupture of abdominal muscles, weakness of muscles, obesity, tumors, ascites, and atrophy of muscles and tissue about the hernial rings all predispose to hernia. Exciting causes are direct and indirect. Direct, are muscular effort or sudden strain, such as lifting, straining at stool or coughing. Indirect causes are chronic bronchitis, pulmonary affections in general, and habitual constipation. A hernial tumor may present immediately following sudden strains when no signs of hernia existed previously. Strangulation may also occur, as in a case mentioned of a young man operated on in the New York Hospital. The patient had never noticed his right testicle, but while walking along the street a tumor the size of an egg appeared in the groin, immediately followed by severe pain, nausea and vomiting. Operation disclosed strangulated loop of intestine and partly descended testis.

W. B. COLEY:—Family history in 25%.—40% are ruptured before the age of 35, and 60% after that age. Occupation is an important factor in causing hernia. Increased liability to muscular strain in men is undoubtedly an important factor in

explaining the higher per cent. in men over women. Parturition a frequent cause in females.

GARRIGUES:—Inguinal hernia is more common in males because the canal is larger due to the passage of the cord. Femoral hernia is more common in females because of the anatomical difference in the pelvis, poudarts ligament being longer tends to make the femoral ring weaker.

DECOSTA:—Muscular effort chief exciting cause of hernia.

W. T. BULL:—A large proportion of hernial are due to sudden and severe strain.

You may note the authorities cited, and how closely they adhere to the same trend of thought in defining the causes of hernia, viz.: That there is an hereditary predisposition to hernia. That a larger per cent. of hernia are congenital, present at birth or acquired early in life. That hernia may be and is due to weak abdominal wall from any cause. And that sudden and violent strain is the most potent factor in the production of hernia. That we have two general classifications of hernia, congenital and acquired. Two general causes, predisposing and exciting. Predisposing causes are heredity and disease. Exciting, severe or sudden muscular strain.

Now the terms rupture and hernia are used synonymously. The pathology of hernia demands that the term rupture should not be applied to hernia. Rupture implies a solution of continuity and does not mean a protrusion or hernia. A person may have a rupture but no hernia. In the predisposed there is solution of continuity or imperfection in the musculature of the individual, and if congenital it is due to failure in development in repairing the lines of cleavage in embryo. Note that one cause given for hernia is the non-closure of the peritoneum, which is carried down with the testis. Now it is well known that the peritoneum is no barrier against the production of a hernia because of its elastic and distensible quality; except when due to traumatism alone, and then only temporarily. That in cases of congenital hernia or congenital predisposition to hernia, there is always an abnormally large and weak hernial ring. That there is even sometimes no inguinal canal, the internal and external rings being one. It seems to me quite evident that the closure of the peritoneal pouch is due to the constricting influence in the formation of the inguinal rings. My limited observation has been

that boys at birth having well formed and pendulous scrotums, with well descended testicles, have no predisposition to hernia. But those with short fleshy scrotums and limited descent of testicle, have either hernia present, or predisposition to it. Now it occurs to me that early descent of the testicle in utero means a corresponding early closure of this inguinal cleft, therefore a stronger development of the abdominal wall, and conversely. This is sufficient, it would seem, to account for the greater frequency of hernia in males than females. Also that congenital or acquired hernia is due to muscular and not to peritoneal defects. Femoral hernia being more frequent in females is due to anatomical conditions resulting in more patulous femoral rings. Umbilical hernia, Wyeth states, is congenital and is due to patulous omphalo-mesentery, and that the hernia has no peritoneal covering. I have seen several cases of patulous omphalo-mesenteries which did not close for months, in which there was no hernia. When hernia does occur it must be from failure in development in the abdominal wall about the umbilicus. He states that congenital ventral hernia occurs above the umbilicus and is due to failure in development in the linea-alba. If ventral hernia above the umbilicus is due to failure in development in the linea-alba, why not umbilical hernia also due to the same cause?

Parks seems to comprehend more truly the primary cause of all hernia when he says, "Hernial tumors that suddenly appear after violent exertion have doubtless already made their way through the inguinal canal to the external ring." Such was doubtless the case of the young man cited above by Dennis and he would in all probability not have noticed or been aware of the tumor, said to have suddenly appeared, except from accidental observance, had strangulation not then occurred. Had this young man been on a railway train and this strangulation taken place at the time or shortly after an accident, however slight, the fact would have been attributed solely to the accident. Very many have slight hernia of which they are wholly unaware until discovered by some physician. Many are conscious of a slight enlargement in one or both sides and are wholly ignorant as to the nature of the condition.

I found one such, in which the young man thought for a long time he had some unholy disease, and was ashamed to make it known, until he accidentally observed a friend wearing a truss,

and thereby learned the cause. Having occasion to examine a large number of men for railway employment for a number of years past, I always examine the inguinal rings, and find that in a large per cent. the rings are large and patulous, weak and distensible. The effort at coughing will frequently produce a distinct impulse at the external ring, giving the impression that there is about to occur a direct hernia.

I firmly believe that in every case when hernia has suddenly appeared, if that person had been examined previously, it would have been found that the hernial rings were larger and the surrounding structures weak and non-resistant. In other words; that person has a rupture, congenital or acquired, but no hernia. I also believe that every rupture with or without hernia is congenital primarily, unless produced by direct violence resulting in solution of continuity of the musculature and other tissue at the seat of injury. Intra abdominal pressure might be great enough to produce sudden or gradual prolapse of the uterus or bowel, or to rupture the diaphragm, but I do not believe it can rupture a perfectly developed abdominal wall.

Prof. Thomas H. Manley, from large experience as an operator, and after careful and painstaking investigation, declares himself to believe without qualification, that hernia is never attributable to traumatism alone, unless the violence be applied by some hard, heavy, sharp pointed instrument or substance which punctures or rends the abdominal wall.

Prof. J. B. Morgan quotes from "Sultan's Epitome of Abdominal Hernia" as follows: "In critical examination of a causal relation between hernia and accident we must remember first of all, that a hernia complete in all its parts can never arise at the moment of an accident, or by a simple augmentation of the intra abdominal pressure, be it ever so great. If the hernia first appears at the time of an accident we may certainly suppose that the hernial sac was either congenital or gradually formed."

In this quotation you will observe that indirectly a strong distinction is made between rupture and hernia. When hernia is due to traumatism alone it must evidently be not an immediate consequence but an after consequence of the rupture sustained by the injury. In any case where hernia presents complete in all its parts immediately upon receipt of an injury, though all the objective and subjective signs of direct violence be present, we should conclude that a preformed sac existed. I wish to

cite two cases of my own, illustrative of this. A young man while riding a wild Bronco was thrown violently upon the pommel of his saddle and injured so severely that he was compelled to dismount. He walked a half a block to my office immediately. I found a well defined left inguinal hernia of moderate size, easily reducible but as readily descending on standing. The scrotum and entire inguinal region was extensively swollen and echymotic, and the patient had to be confined to bed with hips elevated to maintain reduction of hernia until inflammation subsided. Well defined hernia persisted until operated upon some time afterward. This young man was unaware of a hernia previous to the accident, though there was a well developed sac at the time of the injury.

A laborer in a bagging mill was caught in the abdomen by a tumbling rod, through the end of which was a cross-pin about a foot in length. The clothing was almost entirely torn from him. The end of the shaft by rotary motion made a hole in the abdominal wall three inches to the left of the umbilicus down to the external oblique. The skin and superficial tissues were torn loose from the muscular wall, leaving a dead space of six inches in diameter about the opening. The cross-pin completely emasculated him with the exception of severing the cords. No hernia appeared. The testes were returned and recovery uneventful. After several weeks confinement to bed and a month or more out of bed recuperating, he returned to work, and some three months later reported to me a slight enlargement in the left inguinal region which proved to be a well defined but slowly protruding hernia.

Rupture is not hernia. Rupture, as applied to the pathology of hernia means solution of continuity or anatomical defect, whether congenital or acquired.

The predisposing cause of hernia is congenital or acquired *rupture*. Acquired rupture may be immediate or gradual in development. If immediate, it may be due to direct violence. If gradual or slow is due to developmental defect, or atrophy, or both combined. When hernia occurs simultaneous with or immediately following an injury, there must have been a pre-existing rupture (anatomical defect)'

Hernia may be due to trauma, but if so must per force be a sequella and not a fact determinable at the time of injury.

*The Organization of an Anti-Tuberculosis Crusade in
Fort Wayne.*

By G. W. McCaskey, M. D., Fort Wayne, Ind.

Tuberculosis is the greatest scourge of the civilized world. Its ravages are so constant and so extensive that it has apparently come to be regarded, at least by the general public and a certain proportion of the medical profession, as one of the great evils which must be patiently endured. Twenty-two years ago the germ of tuberculosis was discovered by Koch, and starting with this fundamental fact our knowledge of this disease has been broadened and deepened until today we understand in a very complete manner its entire pathogenesis. We know, for instance, that no one can become a victim of this disease unless there has been introduced into his body by some means or another the specific germ which causes it. We know, furthermore, that there are for all practical purposes only two methods by which these germs are introduced, namely, inhalation and ingestion. If the civilized world could breathe pure air and eat and drink pure food and fluids, tuberculosis would disappear in a single generation. It may be said that this would be true of practically all contagious diseases, but in dealing with tuberculosis we are fortunately dealing with a disease germ more tangible, more vulnerable, and therefore more controlable than perhaps is the case with any other, and yet, in the face of all these facts no longer debatable, the great white plague continues its triumphal march, decimating our population and desolating our homes.

Now, one of two things is true, either science is mistaken in regard to the facts which it has considered established concerning this disease, or else the conscience of both the lay and professional public, and especially the former, needs to be quickened. If the general proposition above set forth is true, then the annual slaughter which tuberculosis is permitted to make is a social crime of the first magnitude. It is not my intention to canvass the general subject, but rather to present a few facts as near home as possible. In the year 1902 in the state of Indiana there were 4,405 deaths reported from tuberculosis in all its forms, 3,900 of these being what is ordinarily known as consumption or tuberculosis of the lungs. The total deaths from all causes during that year were 34,169, indicating that about one-eighth

of the total mortality is due to tuberculosis. Just think of it. Of every eight funerals that march along our streets, one of them is due to this disease, which there is not the slightest doubt can be substantially blotted out of existence with energetic and intelligent work in which the profession and the lay public would cordially and conscientiously co-operate.

To put it in a little different form, tuberculosis causes more deaths in the State of Indiana than cancer, Bright's disease, influenza, diphtheria and croup, dysentery, diabetes, malaria, rheumatism, measles, scarlet fever and small pox combined.

Now, as bearing upon the eradicability of tuberculosis, I wish to quote a recent utterance of Mr. J. F. Roche, a life insurance expert, in the Transactions of the Actuarial Society of America. He says: "We on this side of the Atlantic are but beginning to talk of taking measures to eradicate the great white plague, while in some parts of Europe they have fixed the year, about a quarter of a century hence, in which the deaths from consumption will be zero." This may be looked upon as utopian, but I only wish to add that when insurance companies with their millions of capital study a question of this kind, it is done in a thoroughly scientific manner, and their calculations, whatever they may be, are entitled to the most serious consideration.

Practical results justifying this prediction could be cited in various directions if time permitted. I will only refer to the work done in New York where a vigorous campaign has been waged against tuberculosis for several years. As a result of these intelligent systematic efforts, the mortality from tuberculosis has been enormously reduced. In ten years, from 1891 to 1901, the mortality was reduced from 3.55 to 2.89, or a reduction of 16% in ten years. As the public and profession become educated, however, the death rate is falling more rapidly, and for the first six months of 1902, the latest data which happened to be available, there had been an actual reduction of 10% from the death rate of 1901, and the total reduction has now reached about 40%.

Now let us bring the question still nearer home. In Allen County during the year 1902 there were 135 deaths from tuberculosis out of a total mortality of 946. Let us make, if you please a cold mathematical calculation based upon economic facts concerning these cases. If the value of one human life is placed at \$10,000.00, the actual loss in Allen County each year by the

deaths from tuberculosis is more than a million dollars. But this is not all. The large majority of infectious diseases, such as scarlet fever, diphtheria, typhoid fever and the like, when fatal, only last a few weeks. It has been calculated upon a very conservative basis that in the average fatal case of tuberculosis there are over three hundred days of invalidism. If we estimate the earning power of each individual at one dollar per day, and the care and maintenance during this prolonged illness at one dollar and a half per day, we have an additional loss of \$751.00 for the three hundred days for each patient, which represents an additional loss of over \$75,000.00 per annum. As a pure business proposition, therefore, the question of tuberculosis is entitled to the serious consideration of every individual who has the welfare of the community at heart.

There are certainly higher motives than these, however, to actuate human endeavor in such a matter, but I will not dwell upon them as I have other purposes in view, and take it for granted that they are obvious to every normally constituted person.

Now, what is necessary in order to wage a successful warfare against tuberculosis. In general it may be said to be an effective campaign of education and the awakening of public and individual conscience concerning the obligations of those who are sick and the inherent rights of those who are well. For all intents and purposes the disease is solely propagated by the sputum of those who are ill of the pulmonary form of the disease, and it is only necessary to destroy this sputum from all cases in order to rapidly diminish and ultimately eradicate the disease. This, it must be conceded, is a Herculean task, but it is nevertheless a task which has become an obligation, and which should be undertaken without undue delay. It is not going to be accomplished by any ephemeral exhibition of enthusiasm, but must be gone about in a rational business-like manner.

Within the last year there has been organized within the United States a national society for the study of tuberculosis, and within the last few weeks a state society has been organized in Indiana which it is hoped will be a powerful factor in the campaign against this disease. Among other things this society proposes to go before the next legislature and make a determined effort to secure a state sanitarium for the treatment of consumption. Such an institution is a necessity, as it is quite impossible

for the consumptive poor, who are just able and often not quite able to solve the bread and butter problem, to deal with the cases of pulmonary tuberculosis which occur in their families in a humane, intelligent, and at the same time, sanitary manner; for overcrowding, filth, and lack of light and ventilation are the strongest allies of tuberculosis. This leads me to briefly mention the results of treatment.

Early tuberculosis is a very curable disease, and in the latest statistics covering the last three years' work of the Friedrich-Sheim sanitarium in Germany it has been found possible to trace 97% of all the patients treated. At the end of three to four years, 70% of those in the first stage were still at work, (the ability to work being taken as the criterion of cure); 55% of those in the second stage and 23% of those in the third. Sanitarium treatment, therefore, affords something more than prophylaxis for the healthy portion of the community.

The precise method to be adopted in fighting tuberculosis is a question to be decided by the local conditions, and I feel personally somewhat uncertain as to the course which should be pursued here in Fort Wayne. One thing appears to be perfectly obvious, and that is that it should be an organized effort on the part of the medical profession and as much of the lay public as can be induced to take an active interest in it. The principal object sought for should be, in my opinion, a campaign of education which should as rapidly and effectually as possible reach the masses of the people and instruct them concerning the nature and communicability of tuberculosis, and impress upon them the absolute necessity for certain precautionary measures for the protection of their own families and the public at large. In thinking the matter over with special reference to the situation here in Fort Wayne, in so far as I understand it, there appear to me to be a number of factors which can be utilized in this work. First, we have the visiting nurse league already in existence and doing an excellent work, with a capacity for doing much more and much better work were it not handicapped by a lack of cash, a condition which should not be permitted to continue. In Chicago it is through the corresponding association that the principal work against tuberculosis is carried on. At the present time the nurses league here in Fort Wayne only reaches the poorest classes who are willing to accept and imperatively need charitable aid. Of course, in the work of

this organization tuberculosis is simply an incident, but it is a very large one, and the active workers in the league would only be too glad to concentrate their efforts upon tuberculosis if they could receive the proper sort of encouragement and aid. Another class able to pay something for such aid as can be rendered by a visiting nurse will be reached whenever the league is supplied with the necessary funds to employ a trained nurse for that purpose, as this is a part of their plan. Through this organization, if properly supported, an immense amount of good can be accomplished in this direction.

The family physician is another important factor in this proposed educational campaign. Nearly all the cases of tuberculosis are seen first by the family physician, who should not only recognize their nature, but should consider himself obligated to instruct the patient and the family in the essential requisites of a rational prophylaxis. While this is undoubtedly done by many physicians there is good reason to fear that it is neglected by many others.

Properly constructed circulars of information are essential and are used extensively in New York, Chicago and elsewhere. These circulars are designed to teach the public in an authoritative manner the important facts concerning the disease, and where sufficient interest is awakened can be kept for ready reference for any length of time. This is very important, as the facts presented by physicians or visiting nurses are new to the laity and especially to the more or less ignorant class where perhaps more than anywhere else the danger lies and iteration and reiteration is necessary and such a circular is very useful. It is true that it will be frequently lost or destroyed, but it can be easily replaced and will, I am convinced, finally accomplish its object in many instances.

The public press is another medium which can perhaps be very properly used for hammering the needed information into the heads of a certain class of the public. Public lectures can also be utilized in this way. A large number of such lectures are given under the auspices of the Chicago committee who have this work in charge.

An important question with us here in Fort Wayne is, shall we have a special organization labelled an antituberculosis league or something of that sort, or shall we operate through the visiting organizations of the medical profession and the

visiting nurse league. On this point I am scarcely prepared to make a definite recommendation. This point can, I think, be better decided after a more thorough study of the situation by a suitable committee. This committee should, I think, be composed of both physicians and laymen, the latter including business men and active charity workers. As a basis for discussion, I would recommend the appointment by the president of an executive committee composed of fifteen members, eight of whom shall be physicians and seven laymen, with power to increase its own number to twenty-five if and whenever deemed advisable. The purpose of this committee should be to make a thorough study of the general questions relative to tuberculosis and the local conditions presented here in Fort Wayne, and outline a plan of work which shall seem to them to meet the local requirements. This committee might be authorized to call a general meeting of the lay and professional public for the purpose of organizing a special society or league in case this is deemed advisable, or it can proceed with the collection of funds to organize and carry out the work, and simply remain a committee of the medical society, working under its sanction and with its co-operation, and making, for instance, semi-annual reports to the society. In my opinion two meetings a year could very profitably be given up by this society entirely to the discussion of the subject of tuberculosis. This would not be as large a proportion of the annual meetings as the death rate from tuberculosis bears to the total mortality. These meetings could well be made educational for the public by a series of brief talks along certain lines by members of the society and laymen, or by invited guests from abroad.

I have purposely omitted any detailed discussion of the methods to be carried out in this work. My object has been to present the case in a general way and point out what I believe will be obvious to everyone that some sort of organized effort ought to be made in the fight against tuberculosis, and ask you to consider and discuss the plans which appear most feasible in the opinion of the society. To work out the details as applied to the homes of consumptives, the sidewalks, the street cars and places of public gathering is too large a problem to be taken up at this time. I feel perfectly confident that if this business is gone about in a proper manner, perseveringly carried out and the results patiently waited for, that we can reduce the mortality

from tuberculosis by one-half in from five to ten years, and in connection with all the forces which are now at work in the same direction and others which will be in operation, the disease ought to be rare in the next generation.

NEWS NOTES *and* COMMENTS



We have recently received an enlarged copy of the above picture, "The Doctor," by Luke Fildes, together with one of "The Anatomy Lesson" by Rembrandt, size 13x17 inches, from the Angier Chemical Company, Allston District, Boston, Mass. This firm is sending them to physicians only on receipt of ten cents to cover cost of mailing. Both of these pictures are worthy of a prominent place in any physician's office.

Substitutor Convicted.

On December 8th the well known firm of Kress & Owen Company secured a conviction against Thomas Cruttenden, Jr., a druggist of Toronto, for infringement of the trade mark "Glyco-Thymoline," as registered in Canada. The evidence conclusively showed that the defendant had put up a preparation under the

name "Glyco-Thymol" and with labels worded verbatim et literatim to those of the original manufacturers. The defendant, with a term in prison facing him, agreed to entirely stop the manufacture of "Glyco-Thymol" and destroy all labels, bottles, etc., connected with the sale of that preparation. The Kress & Owen Company, who have built up a very large sale of "Glyco-Thymoline," a preparation valuable in the treatment of catarrhal inflammation of the mucous membrane, are to be congratulated upon having carried the prosecution of Cruttenden to a successful termination. The punishment, however, is altogether too light, as one who by fraud and misrepresentation attempts to profit by imitating the good work of others, should receive severer punishment than a court order to "be good."

Physicians' Defense Company Lower Rates.

The Physicians' Defense Company, of Fort Wayne, a corporation which on the payment of a stated premium defends physicians in malpractice suits, has notified its contract holders that beginning with January 1, 1905, the premium is to be reduced to \$15.00 per year. The company has been very successful in building up a large business, and is to be congratulated upon being able to reduce the premium which it has always seemed to us sufficiently low, considering the service rendered. The company defends its policy holders, when sued for malpractice, to the extent of \$5,000 if necessary, and has obtained a deserved reputation for much more successful service than it would be possible for a physician to obtain if compelled to defend his own suits and select attorneys from among those who have probably had but little experience in malpractice work.

Intestinal Parasites.

Messrs. Battle & Company, of 2001 Locust Street, Saint Louis, Mo., have just issued the fourth of a series of twelve colored illustrations of intestinal parasites, and will send them free to physicians on application.

Personals.

Dr. J. C. Wallace, Fort Wayne, who has been serving so efficiently as Secretary of the Fort Wayne Medical Society, has been re-elected for another year.

Dr. J. F. Morse, formerly of Garret, Ind., has opened an office in Fort Wayne.

Dr. N. L. Deming, Fort Wayne, is convalescing from an illness which has confined him for several weeks.

Dr. L. P. Drayer, Fort Wayne, has been elected President of the Fort Wayne Medical Society, to serve during the year 1905.

Dr. W. E. Stemen, formerly of Fort Wayne, but now residing at Denver, visited his father, Dr. C. B. Stemen, during the holidays.

Dr. W. W. Carey, formerly of Spencerville, has begun the practice of medicine in Fort Wayne with office and residence at 2405 Calhoun Street.

G. B. M. Bower, M. D., Fort Wayne, and Miss Lilly Weld, of Guthrie Centre, Iowa, were married December 26, 1904. They are now at home at 326 East Berry Street.

Dr. M. F. Porter, Fort Wayne, was the guest of honor at the Tippecanoe County Medical Society at Lafayette, Indiana, during the holidays, and delivered an address,

Dr. A. E. Bulson, Jr., Fort Wayne, has been elected Secretary of the Section on Ophthalmology of the American Medical Association. Doctor Bulson also served as secretary during 1904.

Dr. Louis Geisinger, house physician at Saint Joseph hospital, Fort Wayne, will begin the practice of medicine at his old home, Auburn, Indiana, in April, following the completion of his term of service at the hospital.

Dr. W. N. Wishard, Indianapolis, President of the Council of the Indiana State Medical Association, is attending the Pan-American Congress at Panama, and before returning home will visit Cuba and Porto Rica. He expects to resume his practice about February 15.

Dr. H. A. Duemling, Fort Wayne, has been selected the chief of the staff of medical directors of the new Fort Wayne Hospital. The other members of the active staff are the prominent Lutheran physicians of the city. In addition to the regular staff there is a consulting staff composed of other leading physicians of the city.

C O R R E S P O N D E N C E

ELKHART, IND., Jan. 1, 1905.

Fort Wayne Medical Journal-Magazine, Fort Wayne, Ind.

GENTLEMEN:—With your kind permission I herewith ask a bit of information. Is it necessary for one to be a physician or pharmacist in order to place a liniment or salve, which is not poisonous unless taken internally, on the market? As you publish the Medical Journal no doubt you are in position to know.

Thanking you in advance for your kind favor, I remain,

Yours truly,

F. J. BEIER,

214 W. Jackson St., Elkhart, Ind.

P. S.—Is it necessary for one to have a license to enter into this business?

F. J. B.

FORT WAYNE, IND., Jan. 4, 1905.

F. J. Bieer, 214 Jackson Street, Elkhart, Ind.

DEAR SIR:—Answering your letter of January 1st, will say that an authoratative opinion with reference to the matter about which you make inquiry should be obtained from the Board of Medical Registration and Examination of Indiana. We believe that according to the laws of Indiana it is not necessary for one to be either a physician or pharmacist in order to place on the market a proprietary remedy, and yet it is quite possible that the members of the Board of Medical Registration and Examination would decide differently, as they have a habit of construing the law to suit themselves and their autocratic tendencies. As you are probably contemplating placing a proprietary remedy on the market we presume the board will not molest you, as it is inclined to show its authority in regulating the work of individuals and companies not perhaps so questionable as yours. However, if you desire a conclusive opinion on the subject you should write the board.

Very truly yours,

FORT WAYNE MEDICAL JOURNAL-MAGAZINE.

Albert E. Bulson, Jr., Editor and Manager.

SOCIETY PROCEEDINGS

Fort Wayne Medical Society.

Meeting of Tuesday, October 25th.

Society called to order by President Morgan with 35 members and guests present. Minutes of two previous meetings read and approved.

CLINICAL CASES.—Dr. H. A. Duemling reported a *unique case of left inguinal hernia* in a woman fifty-six years of age. First symptoms were noticed eighteen years ago. At the present time the hernia is enclosed in a sac that reaches down to the knee and involves the left labia majora. The tumor is sausage shaped, about three inches in diameter, and the vulvular hair from the mid line of the body extends down almost from the tip of tumor to the knee. The patient has been cleaning house for a week and as a result of the pain from the hernia has been forced to seek medical aid. There are no symptoms of obstruction of the bowels, though a gurgling sound is heard in the tumor. The percussion note is more or less flat.

In discussing the case Dr. C. B. Stemen said that he was of the opinion that operation would show a great quantity of omentum in the sac. He reported a very similar case which had come to operation under his hands.

Dr. M. F. Porter reported a case of *ovarian cyst with twisted pedicle in a woman three months pregnant*. The patient, aged 24, married four years, with two children, the youngest eighteen months old, was seen for the first time yesterday and she reported that she never had any serious illness, and had made good recoveries from previous labors. Supposed herself pregnant three months, as she had not menstruated since July 15th. Six days ago had pain in the right iliac region for about four hours, the pain quickly becoming intense. Bowels moved freely twice daily, but also vomited, and the vomiting continued occasionally for four days, then stopped two days and resumed again today. Temperature two degrees above normal. Pulse 58 when first seen by her physician, and then went up to 120. Is well nourished. Abdomen almost as full as at term but more flat. Examination

yesterday showed a large fluctuating tumor, more prominent on the right, with tenderness all over the abdomen. Uterus cannot be outlined. Cervix lacerated. Pulse 120. Temperature 100 2-5. A diagnosis of ovarian cyst with twisted pedicle was made. On operation the cyst was tapped and ten pints of very bloody fluid withdrawn. Two complete twists were found, the twists being to the left, according to the usual finding in right-sided cysts. (Cysts exhibited). Attention was called to the difference in color of the different sections of the cysts. The red color is characteristic of extravasation of blood into the wall of the cysts. The leaden color is the same color as the veins which show through the skin and is characteristic of extravasation into the tumor. Dr. Porter said that this was the third time within the last few months that a case of ovarian cyst with twisted pedicle accompanying pregnancy had come under his observation. He said that it remains to be seen as to whether or not the patient will miscarry. Neither of the others did. Pregnancy is one of the causes of the twist, and in a series of ten cases of ovarian twist of twisted pedicle which Dr. Porter has had he said that four of them were pregnant. A point of interest is that a large number of the possessors of such a tumor are not aware of the fact that they have it until a twist occurs, and then the tumor grows rapidly. Right-sided tumors usually have a left twist, and left-sided tumors usually have a right-sided twist.

PAPERS:—Dr. Henry Ranke presented a paper on "*Ophthalmia Neonatorum*." The essayist said that beginning with the discovery of the gonococcus in the discharges from the eyes of new born babes, and the introduction of Crede's method of prophylaxis, ophthalmia neonatorum should become a rare disease or disappear altogether. Unfortunately, owing to the fact that Crede's method is not employed and the diagnosis of ophthalmia neonatorum is not made sufficiently early, the disease is not rare, and the disastrous sequelae are quite commonly seen. Infections may be accounted for through the passing of the child over the infected surface of the genital tract, or by carelessness of the attendants. There are two forms of infection, mild and severe. The mild form is due to the bacilli colli communis, pneumococcus or streptococcus. The virulent form is due to infection with the gonococcus. The virulent form makes its appearance usually on the third or fourth day, with severe

swelling or redness of the lids and watery discharge. Usually both eyes are affected. After a few days the secretion becomes more purulent, the skin over the lids wrinkles as a result of the subsidence of the swelling, and the conjunctiva is dark red and thickened, and bathed with an abundance of thick yellow pus. This latter stage lasts for weeks, during which time the cornea is in great danger of ulceration, which is the greatest menace to the eye through the possibility of perforation and introduction of the infection to the interior of the eye. With perforation there is usually prolapse of iris, formation of anterior synechia, the development of panophthalmitis, and if the eyeball is saved, resulting opacity and impairment, or complete loss of vision. Diagnosis is definitely settled by history of gonorrhœa in the mother, the early onset and appearances of the disease, and definitely by finding the gonococcus in the secretion. If diagnosed and treated early and properly there is no reason why the eyes should not be saved if the eyes are healthy. Prophylaxis is of paramount value and should begin before the child is born. If there is some discharge from the genitals of the mother, or a history of gonorrhœa, antipartum douches are indicated. After the birth of the child the eyes should be thoroughly washed. In suspicious cases Crede's method should be employed, which consists in dropping one drop of a 2% solution of nitrate of silver in each eye. Argyrol in 25%, and protargol in 10% solution is also very efficient. All infants should have their eyes washed with a warm boracic acid solution after birth. After the condition has developed the conjunctival sac should be kept as free as possible by flushing with a warm boracic acid solution. Between the flushings iced compresses should be applied. While the discharge is free and creamy a few drops of 2% solution of nitrate of silver should be applied in each eye twice daily. During the first stage, when the discharges are thin and sanguinous, the silver nitrate is not indicated. After the acute stage is passed the silver nitrate, protargol, argyrol or zinc sulphate are indicated.

In opening the discussion Dr. A. E. Bulson, Jr.; said that it is essential that physicians remember that any new born babe who presents a discharge from the eye at any time during the first week, should be considered as suffering from gonorrhœal ophthalmia until a bacterial examination shows differently. At the onset of the discharge it is always advisable to make a

bacterial examination with a view to determining the character of the infection present, and with a view to guiding the physicians in the selection of the proper treatment. Some babies are born with the discharge, and in such instances it is claimed by some authorities that the disease originates while the child is yet within the mother's uterus. Dr. Bulson said that Crede's prophylactic measure has been responsible for the saving of a great many eyes that otherwise would have been lost, and in the lying-in hospitals it is regularly employed in all cases whether there is a suspicion of gonorrhœal infection or not. In private practice it should always be adopted when there is the slightest reason for suspicion. Canthotomy, or slitting the outer canthus is a measure of the utmost importance when there is such extensive swelling of the lids as to prevent proper opening of the eye and careful flushing. Few nurses know how to flush the eye properly, and with a swollen eye they seldom are able to thoroughly cleanse the cul de sac. The difficulty in opening the eye when there is swelling present is also an element in the possible production of trauma. Slitting the canthus facilitates opening the eye, and keeping it thoroughly clean. Protection of the cornea is of utmost importance, as the slightest abrasion of its surface permits introduction of infection and with it possible destruction of the eye. The cleansing should be performed every fifteen minutes night and day if necessary in order to keep the eye free from discharge. Argyrol was endorsed as being preferable to nitrate of silver on account of its lessened liability to erode the corneal surface while yet possessing sufficient bactericidal powers.

Dr. K. K. Wheelock said that the subject should be of great importance to the general practitioner who is the first to see these cases of gonorrhœal ophthalmia, and upon whom the responsibility of the early recognition of the disease and institution of proper treatment depends. He should understand that he ought to recognize the significance of beginning sore eyes in a new born babe, and treat accordingly, or upon the first manifestation of trouble call in some one competent to give the case proper attention. Discharges from the eyes of babes three to five days after birth should always be looked upon with suspicion, and the physician will make no mistake if he considers such a case gonorrhœal in nature until a bacterial examination or other indications point to a different diagnosis. A few drops

of a nitrate of silver solution, followed by the regular use of eye drops, should not be considered the only essential to such treatment. The eyes should be kept clean, and the only way that they can be kept clean is by thoroughly cleansing them at regular and frequent intervals. When the cornea looks as though the breath had been blown upon it then it is infected and serious complications may be expected.

Dr. S. H. Havice said that he had not had such good results with argyrol or protargol as he had had with nitrate of silver, therefore he preferred the latter. He said that he believed that disastrous results sometimes followed carelessness on the part of the nurse in cleansing the eyes; the eye-dropper, the finger nails, or the force of the fluid itself causing an erosion of the cornea and entrance of germs to the corneal tissue. Nurses should be personally shown how to cleanse the eyes. Dr. Havice said that he believed adrenalin would relieve chemosis and thus assist in increasing the nutrition in part, though as yet he had not had occasion to try such treatment.

Dr. Maurice Rosenthal said that in his judgment gonorrhœal infection should be considered a most serious disease and treated only by a specialist when possible to obtain the services of one. There is altogether too much at stake to warrant the general physician in taking any chances unless he is actually compelled to do so because a specialist is not at hand.

Dr. E. J. McOscar said that the keynote is cleanliness, and the physician who recognizes the disease early and institutes careful and frequent cleansing of the eye cannot be criticized. It is not always possible to see these cases early, for sometimes the attention of the physician is not called to the condition until it has existed for some hours. Without a very definite idea as to what constitutes proper treatment the physician is negligent in duty if he does not call in aid.

"Pathologic Changes Resulting from Prostatic Enlargement," was the title of a paper by Dr. Chas. E. Barnett. The essayist said that there is still room in the field of research for the cause of prostatic enlargement. Of the different solutions offered, atheroma, perverted orchicism, producing hyperplasia and inflammation seem to be the favored ones. Inflammation before many years will perhaps be proven to be the most frequent cause of prostatic enlargement, yet Thompson absolutely denies it as a factor, and an opinion coming from him is to be respected.

It is probable that after the prostatic acini becomes once infected, especially with the diplococcus of Neiser, on account of a posterior urethritis directly, or indirectly from anterior urethritis, or from the typhoid or colon bacilli from the bowel, that on account of inability of the prostatic acini to drain themselves there remains a source of infection that is ever ready to become congested, and this congestion stimulates cell multiplication. The cells being primarily embryologic myoblasts, or adenomatous foci, the pathologic evolutionary metamorphosis accounts for the change from a fibro-myo-adenoma into an adeno-myo-fibroma. The pelvic fascia is responsible for all future pathology after enlargement begins, on account of its inability to accommodate itself to the displacements. The prostatic urethra is enlarged, presenting a greater surface for irritation, and cystitis is added as a complication as a result of the distortion of the bladder from enlargement of the prostate. The inflammation, which travels up the urinary tract, attended with general infection, makes an operation under such circumstances dangerous. Two cases illustrating the dangers of operative procedure under such conditions were reported. Concluding the paper, Dr. Barnett said that every general practitioner should be prepared to at least make a rectal examination of the prostate whenever symptoms point to prostatic enlargement, and if hypertrophic changes are found which under careful treatment do not change for the better, by diminishment in size of the tumor, surgical intervention should be advised and insisted upon. A catheter life is always dangerous from the fact that sooner or later infection is bound to occur. Early prostatic operations are not dangerous, and therefore should be encouraged with a view to cutting out the possibility of a catheter life. Late prostatic operations are always dangerous. Not all prostatic enlargements are confined to old men, and therefore the young men should be examined for it also when symptoms point in that direction.

Dr. H. A. Duemling opened the discussion by saying that disturbance with the internal sphincter is one of the first symptoms of enlargement of the prostate. He spoke of the saculation of the bladder, and the formation of calculi from retention of urine. He said he believed in early prostatic operations, but that some old men who are apparently comfortable while leading a catheter life might with perfect propriety be allowed to con-

tinue the use of the catheter rather than undergo operative procedures in the face of complications which might end in the loss of life. He said that he had been rash enough to invent a hollow cane containing a receptacle for catheters, and a box of vaseline in the top, for the use of old men obliged to live a catheter life. The catheters, under such conditions, can be kept reasonably free from infection.

Dr. Maurice Rosenthal said that the majority of these cases of prostatic enlargement should be operated, for they offer a strong probability of successful results. He said that he thought there was no question but that the catheter was the cause of infection of the bladder.

Dr. C. B. Stemen said he considered it proper to operate on these cases, although he personally knew of men who had been using a catheter ten, fifteen and even twenty years without showing any indication of sepsis.

Bills from Fort Wayne Club were allowed.

Adjourned.

J. C. WALLACE, M. D., Sec'y.

Noble County Medical Society.

The regular meeting of the above named society was held at Ligonier, Ind., Tuesday, January 3rd. The officers of the Society are Dr. John W. Hayes, President; Dr. W. F. Carver, Secretary; both of Albion. Following a report by Dr. W. T. Green, County Health Officer, an interesting program, consisting of papers on some of the more common exanthematous diseases was presented. The papers were: "The Symptoms, Differential Diagnosis and Treatment of Scarlatina," by Dr. S. L. Shaw, Kimmel. "Rubeola," by Dr. J. W. Luckev, Wolf Lake. "Variola and Varioloid," Dr. J. L. Gilbert, Kendallville. "Rubella," by Dr. A. W. Johnson, Wawaka. "Vericella," Dr. O. P. Franks, Brimfield. "Prophylaxis and Hygiene in Contagious Exanthematous Diseases," by Dr. C. A. Woodruff, Ligonier.

MEDICAL REVIEWS

Department of Medicine and Therapeutics

In Charge of George W. McCaskey, A. M., M. D.
Professor of Clinical Medicine in the Fort Wayne College of Medicine, Ft. Wayne, Ind.

Clinical Measurement of Blood Pressure.

Abrams, in an article on this subject, concludes as follows:

1. That blood pressure is an expression of action of two chief factors; ventricular force and vaso constriction.
2. The inhalation of amyl nitrite will dissipate the vasoconstrictor factor and bring into play the ventricular force, which is the real factor to be encouraged in a failing heart.
3. The vasoconstrictor factor may and does compensate ventricular inadequacy, for it is essential in most cardioarterial diseases for the blood pressure to be maintained to afford better nutrition for the heart and to promote arterial elasticity as a means of establishing the circulation of the blood.
4. The recognition of the ventricular and vasomotor factors in blood pressure serves as a clue in the correct administration of cardiotonics.
5. In the individual endowed with cardiac bealth the removal of the vasomotor factor causes an increase in blood pressure, whereas the converse condition causes the latter to fall, and the degree of reduction is proportional to the degree of cardiac enfeeblement.
6. The execution of the foregoing manœuvres in estimating heart vigor is by no means comparable to a correct method of cardiac auscultation, although the latter method does not indicate how much of the cardiac force may be attributed to increased peripheral resistance. Cardiac auscultation in conjunction with the sphygmanometer and the inhalation of amyl nitrite constitute the ideal methods for eliciting the real condition of things.
7. In estimating blood pressure the sphygmmanometer only gauges the force of the left ventricle, and to determine the sufficiency of the right ventricle auscultation of the pulmonic sounds and a physical examination of the lungs are alone adequate.
8. There are certain individuals in whom one finds high blood pressure without cardiac weakness, and after inhalation

of amyl nitrite the blood pressure remains the same. Such cases are associated with traces of albumin in the urine, which is of low specific gravity, and are practically instances of incipient chronic interstitial nephritis.

9. It is evident that persistent high blood pressure dependent on augmented tonus of the vasomotor center is a cogent etiological factor in arteriosclerosis independent of any other cause, and is merely the reaction of arterial overwork.

10. Just as myocardial sufficiency is tested by counting the pulse, first in the erect and then in the recumbent posture, and noting that the less pronounced pulse retardation is in recumbency, the greater the degree of heart insufficiency, so may vasomotor sufficiency be determined. Normally there is a postural variation in blood pressure. In the erect posture blood pressure rises owing to compensatory arteriole contraction, and this difference between recumbency and standing varies between 15 and 30 mm., according to my measurements with the Riva-Rocci instrument. In vasomotor insufficiency the postural variations are reversed, and this is especially true in neurasthenia, notably the angiopathic form. The bromides carried to their physiological effects, will cause high blood pressure to fall, if dependent on augmented tonus of the vasomotor centre.—*Amer. Jour. Med. Sciences.*

Diphtheria.

White and Smith in *Boston Medical and Surgical Journal*, base their paper on the study of nearly one thousand cases of diphtheria treated at the Boston City Hospital during one year. They present general statistics of all the cases, consider the cardiac signs and symptoms that were common to a large number of the patients, and devote the bulk of their paper to the special consideration of a small group of cases in which the heart symptoms were unusually prominent and important. The following points are emphasized: 1. The great frequency of heart murmurs and the irregularity of the pulse. The prognosis does not depend upon the mere presence of these signs, but upon the severity of the infection, the length of time without treatment, the rate and degree of irregularity of the pulse and the presence of the graver signs of the cardiac disturbance. 2. Moderate disturbance of the heart is very common; severe com-

plications are infrequent. 3. Frequent examinations of the heart are necessary to really determine its condition, because of the marked changes of rhythm from one hour to the next. 4. Gallop rhythm, late vomiting and epigastric pain and tenderness are important as danger signals of severe heart complications. The association of late vomiting with gallop rhythm renders the outlook almost hopeless. 5. Antitoxine does not affect the heart unfavorably, but, on the other hand, its early use prevents the appearance of grave heart complications. 6. Frequent examination of the heart and pulse in the second and third week of the illness are necessary, that being the time when severe heart complications most frequently occur. 7. Bronchopneumonia is a more frequent fatal complication of diphtheria than heart disease; sudden death from heart disease is very rare when patients are kept in bed for a proper period. 8. Prolonged rest in bed is necessary in all severe cases; it is not necessary to keep all patients in bed who have cardiac murmurs and a pulse which is somewhat irregular and increased in rate. One should be governed by the stage of the illness and the patient's general condition. If no serious heart trouble has developed within four weeks the patients are usually safe from this complication. 9. Heart murmurs and irregularity are of long duration in many cases, and make it necessary to watch the condition of the heart long after convalescence in all severe cases.—*New York Medical Journal*.

DEPARTMENT OF SURGERY GYNAECOLOGY and OBSTETRICS

In Charge of Miles F. Porter, A. M., M. D.
Professor of Surgery and Gynaecology in the Fort Wayne College of Medicine,

Carcinoma of the Breast.

Ennis (*St. Paul Medical Journal*, June, 1904) believes that cancer of the breast is at first a local disease. Metastases occur in only 24% of cases during the first year. The complete operation has demonstrated that local recurrence can be prevented in from 74 to 82% of cases, even when many have gone a year or more. The conclusion necessarily follows that if all cases

were operated on within the first year, one may reasonably expect 75% of permanent cures, and if within six months, a considerably higher percentage. It is, therefore, the duty of every physician to embrace such proper occasions as offer to educate the laity as to the dangerous probabilities inherent in every breast-tumor and the necessity for early and complete surgical treatment.

Pregnancy After Ventro-Suspension and Vagino-Fixation.

Oni, (*Annales de Gyn. et d'Obstetr.*, April, 1904,) from a review of the literature on this subject and his own experiences, finds that the ventro-suspension sutures must be placed on the anterior surface of the fundus uteri below the insertion of the tubes in order to avoid trouble in later confinements.

Vagino-fixation is to be done only in women past the menopause. Dührssen's low vaginal fixation is not attended by trouble during labor, but is also not as sure a means of preventing a return of the retroflexion.—*St. Louis Medical Review*.

Iodine Catgut.

The simplest method of sterilizing catgut is that of Claudius. The raw gut, which does not even have to be put through the usual preliminary fat-removing process, is simply wound in single layers on glass spools and dropped into a covered jar of fluid consisting of iodine, 1 part; potassium iodide 1 part; water, 100 parts; and there it is allowed to remain eight days. Unused portions of catgut are re-sterilized by dropping them again in the solution for from half an hour to eight days. The gut is flexible, does not "kink," and is of proper tensile strength. It is not only aseptic but *antiseptic*. It may be kept in the solution, but not longer than three months, after which time it would become very brittle.—*International Journal Surgery*, Nov. 1904.

Toxin in the Treatment and Prevention of Diphtheria.

Nadoll, (*British Medical Journal*) says every case of diphtheria should be treated with antitoxin. As a rule, the diagnosis is easily made clinically, and it is better in such cases not to wait for the bacteriological report, but to inject the serum at once. Then, if the diagnosis is confirmed by the bacteriologist, one has

"stolen a march" of several hours on the disease; if the case proves not to have been diphtherial, one has at least done no harm.

The serum should be administered, not only early, but also freely, 3,000 units being an average first dose.

This use of antitoxin in no way interferes with the employment of any medicinal or other treatment which may be indicated.

To Prevent Abortion.

If an abortion is threatened a drachm of the fluid extract of viburnum prunifolium should be given every half hour until better and then continued at longer intervals. To prevent abortion begin the use of viburnum four weeks before the expected accident in 15 minim doses four times a day.—*Reg. Med. Visitor.*

DEPARTMENT OF OPHTHALMOLOGY OTOLOGY, LARYNGOLOGY & RHINOLOGY

In Charge of Albert E. Bulson, Jr., B. S., M. D.

Oculist and Aurist for St. Vincent's Orphan Asylum, the Allen County Orphan Asylum and the U. S. Pension Bureau for Northern Indiana and Northern Ohio; Professor of Ophthalmology in the Fort Wayne College of Medicine, Fort Wayne, Indiana.

Christian Science Treatment of Hay Fever.

The following story emanates from Louisville: A man who had been a sufferer from autumnal attacks of hay fever and had annually been obliged to seek the hay fever resorts in order to obtain relief from distressing symptoms, was induced by a relative to try Christian Science treatment under assurances that he would certainly receive benefit. When his hay fever broke out he suffered with it all day and night, and the next morning wrote the Christian Science doctor, who happened to be a woman, who had been informed as to his case, that he desired to be put on treatment immediately. He received assurances that he would at once be given "absent treatment." During the day the weather changed so that before night it was cool and the patient found himself improved, and at night slept better than he had

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since the beginning of his attack of hay-fever. The following and succeeding days the improvement continued, and the patient was about to give Christian Science the credit for a remarkable cure, when with another change of weather, frequently so disastrous to the comfort of hay-fever sufferers, the aggravated symptoms returned in all their severity. Almost at the same time a letter came from the Christian Science doctor, who had been receiving credit for the temporary relief, saying that as she had been unexpectedly called from the city about the time his case was placed in her hands, it had not been possible to give him attention, but she was now ready to give him the usual treatment. Unfortunately for the success of Christian Science the patient left the following day for one of the hay-fever resorts where he found relief which no Christian Science advocate would be satisfied to credit to belief in the faith.

Dangers of Discharging Ears.

Dr. E. B. Dench, at the Atlantic City meeting of the A. M. A., said that the ear as the seat of a chronic suppuration is as dangerous as an appendix which is the subject of recurrent attacks. Successful treatment is that treatment which will eliminate the suppuration, and, unless there is some contraindication, all chronic suppurating ears are best treated by radical operation to prevent later septic developments which may be insidious. With an acute inflammation of the middle ear, when seen and properly treated early, systemic infection seldom occurs. Those cases which for want of proper attention run on into chronic suppuration, are best treated by radical operation.

An Early Sign of Mastoid Disease.

Dr. Philip Hammond (*Jour. A. M. A.*, Nov. 26th.,) says that an early symptom of mastoid disease is the presence of œdema of the posterior canal wall, and this is one of the best guides to the condition of affairs within the bone even in the absence of mastoid tenderness. Patients who are apparently convalescing from an acute inflammation of the middle ear should be closely observed for this sign. It is the one symptom which is in no way masked by the use of the ice-coil, and as such is of the utmost importance.

Non-Operative Treatment of Convergent Strabismus-

Reber, in the *New York and Philadelphia Medical Journal*, has made a statistical study of cases of convergent strabismus. In his conclusions he states that if taken before the fifth year there seems no reason why the strabismus should not be cured by non-operative methods in seventy per cent. of cases. He thinks this percentage will in all probability be increased to eighty per cent. in the next ten years. In his judgment the results of non-operative treatment in children, adhered to with persistence, is infinitely better than any "scissors" statistics so far offered. He quotes the opinion of Dr. Edward Jackson to the effect that the most important single measure in the treatment of squint is the accurate correction of ametropia, and this cannot be accomplished except by one who is capable of measuring the refraction objectively by skiascopy.

Early Mastoid Operation.

Dr. E. B. Dench (*Jour. A. M. A.*, Nov. 26th.,) says that ninety per cent. of cases of staphylococcus infection of the mastoid get well without operation. He believes, however, that suspicious cases do better if operated on. He has given up the use of ice, as he says he has seen a number of cases in which the superficial tenderness improved under its use, and subsequently the cases came to operation and he found very extensive involvement, such as extradural abscess, brain abscess, etc., He thinks the use of ice is dangerous because it masks the symptoms. He considers that edema of the posterior canal wall is one of the best guides as to the condition of affairs in the bone. Tenderness is a misleading symptom for it depends so much upon the temperament of the patient. He says he registers himself as a radical man in advocating early operation in mastoid involvement, but that he feels warranted in taking that position because of the disastrous results, seen in his early practice and in the practice of some of his confreres, when a waiting policy had been pursued.



BOOK REVIEWS

Physicians Visiting List for 1905.—P. Blakiston's & Co. Philadelphia, Pa. \$1.00.

This popular record is still holding its own in professional opinion. Made in convenient sizes for the pocket it makes a compact, labor-saving day book. B. VAN S.

A Compend of Medical Latin.—By W. T. St. Clair, A. M., Professor of the Latin Language in Louisville High School. Second Edition, Revised. P. Blakiston's Sons & Co. Philadelphia. Price \$1.00.

This is a very good manual for those who neglected the study of Latin in their earlier years. It is useful for those who propose to study Latin without the help of a teacher. B. VAN S.

Lectures to General Practitioners on the Diseases of the Stomach and Intestines.—With an account of their relations to other diseases and of the most recent methods applicable to the diagnosis and treatment of them in general; also "The Gastro-Intestinal Clinic," in which all such diseases are separately considered. By Boardman Reed, M. D., Professor of Diseases of the Gastro-Intestinal Tract, Hygiene, and Climatology in the Department of Medicine of Temple College, Philadelphia; Attending Physician to the Samaritan Hospital; Member of the American Medical Association, American Academy of Medicine, American Electro-Therapeutic Association; Foreign Member of the French Societe D'Electrotherapie, etc. Illustrated. New York. E. B. Treat & Company, 241-243 West 23d Street.

A new work on gastro-intestinal diseases by an American author is an event of considerable importance in the history of American medical literature. The author of the present volume has been long and favorably known in current medical literature. A careful examination of the volume fully justifies the expectations awakened by an acquaintance with his previous work.

The lecture method, which the author has adopted, has some advantages and also some objections. It is possible in this way to convey the information in an easy, off-hand manner, somewhat characteristic of the lecture room, but the tendency to diffuseness and commonplaceness must be carefully guarded against. This the author appears to have done, for the most part, very successfully.

The volume covers the ground of diseases of the stomach and intestines in as thorough a manner as is practicable in a single volume work and includes considerable clinical material as well

as a fairly complete elaboration of laboratory methods. The usual introductory chapter upon anatomy and physiology of the digestive tract is not lacking although such sections are necessarily too brief to be of very great value. It would seem as though anatomy and physiology could be better studied in volumes devoted exclusively to these subjects, although the outline given in such a work serves the purpose of a rapid review preparatory to a systematic reading of the volume, if such is intended.

The very important subject of diet is given ample treatment, and this section will be found a very reliable guide in dealing with this difficult subject.

The growing importance of diseases of the stomach and intestines in practical therapeutics, as their wide relationship to other diseases in the broad realm of pathology becomes better and better understood, makes us welcome every such additional volume from the hands of a practical and scientific clinician as an additional aid in this important field. A cordial reception is bespoken for this volume on the part of the general practitioner, who will find within a reasonable compass a very satisfactory guide to the study of diseases of the digestive tract.

G. W. McC.

The Surgical Treatment of Bright's Disease.—By George M. Edebohls, A. M., M. D., LL. D., Professor of Diseases of Women in the New York Post-Graduate Medical School and Hospital, etc., etc. Frank F. Lisiecki, Publisher, 9 to 15 Murray Street, New York. 1904.

This is a volume of 327 pages, exclusive of the index. The first half of the book is composed of the various papers of the author bearing upon the subjects which have appeared in current publications including the correspondence concerning Ferguson's claim to priority in the operation from the pens of Robinson, Edibohls and Gibbons. Then follows the history in detail of 72 cases of chronic Bright's disease operated upon by the author. This list includes all of the author's cases up to the end of 1903. Following these reports is a chapter in which is carefully analyzed the results obtained in these cases, and a short one giving the conclusions reached by the author based upon his experience. He concludes with the statement that in his opinion surgery is the main, if not the only hope of sufferers from this hitherto incurable malady. A bibliographic list is given and the work is well indexed.

M. F. P.

Fort Wayne Medical Journal-Magazine

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No. 2

EDITORIALS

More About the State Board of Medical Registration and Examination.

Since the receipt by the Secretary of the Fort Wayne College of Medicine of a letter from the Secretary of the State Board of Medical Registration and Examination announcing that the diplomas of the above school would be discriminated against because of a rumor that all the lecture hours in the college courses were not being filled, a number of facts have come to light that do not look well for the Board. Like many another subject, when it is investigated, strange things appear.

The law that created the Board provided for the examination and registration of midwives by said Board. In pursuance of that law, a certain midwife practicing in Fort Wayne was examined and made a grade of 25%. The Secretary of the Board then informed

the local Health Commissioner of that fact, stating that a license had been refused her and requesting her arrest should she attempt to practice. The aforesaid midwife then employed an attorney who accompanied her to Indianapolis and without a re-examination they returned to Fort Wayne with a license for the midwife to practice. The local member of the Board, learning of this state of affairs, went to the County Clerk's office, receipted for the state license of the midwife and took it with him to Indianapolis for the purpose of investigating the matter. It is presumably still under investigation, although this was several months ago.

The "midwife" immediately resumed her abortion practice, which she is yet pursuing to the certain knowledge of practicing physicians of this city, who are as yet powerless to stop it without violating promises of secrecy, which, were they disregarded, would bring into court the families of her victims and hold them up to public shame and censure. This would not be attempted without the acquiescence of the parties concerned, and this is a very hard thing to secure.

The action of the State Board in this matter needs explanation. What is the reason for such action? What power was wielded by the attorney to force the issuance of a license to a midwife, who only made 25% on her examination, without a re-examination?

The letter written by the Secretary of the Board to the Fort Wayne Health Commissioner notifying him of the failure of the midwife to pass her examination, and requesting her arrest in case she began to practice, was shown by him to the local Board member who asked for it to take with him to the meeting. It was given him for that purpose, and he still has it in his possession, although its return has been requested several times.

A Board that is capable of such transactions (and this is not the only one by any manner of means) should not be granted the power of acting as censors on medical colleges, for all that would be necessary would be for a college to employ the same attorney who represented the midwife and any sort of failure to live up to requirements would be tolerated. This attorney is well known, and while his action may be in strict accord with legal ethics, it is far from commendable.

Will the Board please "explain" this case?

B. VAN S.

(Will the Board also "explain" the reasons for granting a certificate to a medical student entitling him to enter the sophomore class of

an Indianapolis medical college when that student had recently failed to pass the entrance examination at the medical college in Fort Wayne, and was very properly refused a certificate entitling him to admission to even the freshman class? When the Board has satisfactorily "explained" these transactions we will cite a sufficient number of other questionable transactions to keep the Board busy with explanations for some time to come. The more the conduct of the Board is investigated the more reprehensible it appears.—ED.)

Northern Tri-State Medical Association.

This wide-awake medical association held its 31st semi-annual meeting in the Zenobia at Toledo, Ohio, January 10, 1905. The program was a full and excellent one, there being ten papers on it, all of which save one were read and discussed. In the evening the members were entertained at a banquet by the members of the Academy of Medicine of Toledo and Lucas County, given at the St. Charles Hotel. The menu was good, the toasts were good, the cigars were good, but best of all was the good fellowship that was rife, which physicians and men in all vocations should foster, for there is nothing which helps more to keep in the future "those old days of the lost sunshine of youth." Dr. Lydston, of Chicago, was the toastmaster and it goes without saying that he "kept things moving." All in all no more pleasant or profitable meeting of this association was ever held. The next meeting will be held at Fort Wayne some time in June, when we hope to have a meeting still a little better than the last. If every doctor would attend some live medical society like this several times a year there would be more good doctors and more happy ones than now. There is no remedy that compares to the medical society for the cure of envy and jealousy.

"If I knew you and you knew me,
And each of us could plainly see,
And by some inner sight divine;
The meaning of your heart and mine
I'm sure that we would differ less
And clasp our hands in friendliness,
Our thoughts would pleasantly agree
If I knew you and you knew me."

M. F. P.

ORIGINAL ARTICLES

No paper published or to be published elsewhere as original
will be accepted in this department.

*The Treatment of Foreign Bodies in the Eye.**

BY

WALTER HAMILTON SNYDER, M. D.,

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Ophthalmic Surgeon to Wabash Railroad Company.

I shall, for our purposes, roughly divide all cases in two classes:

- 1st. Those injuring but not penetrating the ball.
- 2nd. Those penetrating the ball and lodging in the interior of globe.

Now this little talk is absolutely not for specialists, because there are certain features of this very important subject that I shall not even touch upon, but I trust in half an hour I can help settle several things that I can see, as a specialist, trouble the general physician when he treats a case complaining of a foreign body. Now for the first division. This includes cinders, dirt, emery, scale, rust, and the hundreds of things that can and do blow in the eyes. They are usually imbedded in the cornea, that is, those you are most likely to be consulted about. Of course there are many and by far the largest number that float around in the sac until a rush of tears wash it out on the edge where it no longer causes trouble, but these Nature cares for and the patients seldom have to seek medical advice. Now it would seem strange and unnecessary advice to say "first find the foreign body before you try to take it out," but this is exactly what I am going to suggest and very strongly. Find the exact location of the thing you are looking for. Stand behind the patient, lift his head so the light will fall on the cornea and show every scratch and bit of dust on it. Then have the patient look up, then down and toward the nose and with a single bi-convex lens condense the direct light on the cornea and you will be surprised to see how easy it is to say positively whether or not the trouble is located on the cornea. It is a common error for some men to be unable to say whether the black spot they plainly see is on the cornea or iris. Many cases I have seen where efforts had been made to get off the cornea some black spot such as are common on the iris. It is surprising how frequent this error is even among men who ought to know

*Read at the meeting of the Wabash Railroad Surgeons at St. Louis, November 10, 1904.

better. You will lessen your chance of making this error if instead of looking through the cornea you glance at it at such an angle that the light is reflected (demonstrated with watch crystal) and you can with comparative ease see the foreign body.

Now for its removal. This is not always an easy job and probably it is better to let some one specially trained take out the bad ones but I want to tell you how to take out the easy ones. Every doctor who is going to take out foreign bodies would be wise enough to buy a spud or still better a double instrument, needle on one end and spud on the other. This, with a condensing lens, which is of constant use in skin examinations, etc., will fit him up so far as the necessary instruments are concerned. The foreign body should be lifted out, *not scratched out*, as seems to be a very common way of removing them. In lifting them out you do a minimum of harm, while I have seen frightful injury done with a scalpel and the scratching process. I hold the spud like a pen and with my left hand steady the head and open the lids. Before I make any extended search I put in a drop of 3% cocain solution made with 1-1000 Trikresol solution. This is important to the doctor who uses it but little, as it will preserve it a very long time. After this begins to take effect gently search for the body and gently remove and then for a few hours I use cold cloths taken off of ice, then hot applications for eight minutes of each hour. I should prefer hot applications from the first but some patients are more comfortable with cold to start with. After each application flood out the eye with an antiseptic and cooling wash. The key to success was struck by a patient who was sent to me by a brother physician to find and remove a source of irritation. When I found it he remarked "Tom could have done it too, if he had taken the pains and time you did." Specialists get so they do not take possibly as much time in doing these operations as others, but they certainly do take time and lots of it. The rarer but more serious foreign bodies are those penetrating the interior of the eye, generally through the cornea. Probably the commonest of these are steel chips flying from files, chisels, drills, etc. Nearly all these are tempered as hard as glass and the slightest tap is enough to break off a chip and it generally makes for the man's eye. He is often knocked down by the shock. Examination shows an eye reddened, tension minus from leaking of aqueous through wound; careful examination will show the point of entrance of the chip and now comes the crucial time, and the proper treatment is the most

delicate thing we have to decide. If the chip is iron or steel the magnet should be used *at once* before any manipulation is done to increase the difficulty. If the chip is copper or brass the exact location will determine what can be done. Often nothing can be offered but an enucleation to prevent trouble in the unaffected eye. But this should be determined only by an expert. If the chip lodges in the anterior chamber it is comparatively easy to get it out. I have even taken out bits of porcelain insulator which had penetrated the anterior chamber, but I regret to say that too often so much time has been taken up in waiting and so much manipulation that any chance the patient had has been wasted. I think the wisest thing for any one not skilled in this line of work is to bandage in a big soft bandage and send to the nearest specialist all cases of *penetrating* foreign bodies. They might better travel 100 miles than to have the treatment they often get, and could do so with a much better chance of saving the eye. Patients seldom fail to find out that the "do some thing" policy has resulted in their losing their eye and usually feel angry at the doctor. I think as a mere matter of policy they should have the best treatment possible outside of any question of the right thing to do. I have refrained from going into the technic of the operations on this second class of cases because practically every case has some feature different from all others and it is impossible to give a list of what to do in these cases as they are among the most trying to see. Practically if you remove most of the bodies in the first class you will have done more than is well done now.

Heredity.*

BY

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Any attempt to present the subject of heredity as a completed scientific formula will have to be discounted since scientific investigators in this field of research are not, as yet, in agreement in regard to a large amount of detail in the phenomena that are continually coming under observation.

Darwin, the author of the theory of Pan Genesis finally found his theory inadequate owing to the comparatively limited number of facts at his disposal. His theory was founded upon certain broad general principles without any reference to actual facts. The assum-

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tion was that the germ contained millions of primary constituents of all of the most minute portions of the body, and that these constituents are always present in the right place and in the right combination during the process of development, and further, that they are capable of giving rise, in their turn, to parts of organs to which they belong. Such a theory would, necessarily, prove everything, or nothing. Its foundation, however, is vital as it is the one hypothesis that serves as the starting point for all scientific structures that have been erected. It is the theory of the continuity of the Germ Plasm.

Weismann postulates that the Germ Plasm is composed of vital units, each of equal value, but differing in character, containing all the primary constituents of an individual. This ancestral Germ Plasm afforded additional matter wherewith to construct a theory somewhat more complete than that of Darwin's theory.

The difference between the theories of Darwin and Weismann is that the Darwin theory assumes that certain gemules are produced by the body cells, that is, that every cell of the body gives up something of itself to the production of such gemules, the gemules then compose the ancestral Germ Plasm, hence the name "Pan Genesis."

In the theory of Weismann the opposite view is taken, that of Epigenesis. Here the preformation of parts in the Germ Plasm is not postulated, but that the fully formed organism is produced by a gradual process of differentiation, and not merely expanded by the procreative powers of the parents. The vital units composing the Germ Plasm, it is assumed, possess a complex structure which undergoes regular changes during the development of the individual.

Herbert Spencer's theory is that of physiological units. The regeneration of lost parts, e. g., leg or tail of a salamander, led him to the conception of these units. Spencer considers that the whole organism is composed of these units, which are all alike in kind and that the germ cells contain small groups of such physiological units. These groups in the germ cells give the power of reproducing the whole organism inasmuch as the polarity of them leads to their arrangement in such a way that the whole organism is formed anew. The mere difference in the arrangement of the units, all alike in kind, determines the diversity of the parts of the body. They are protean and are capable of arranging themselves in an innumerable variety of ways and so form the most diverse cells, tissues and parts of the body.

The basis of general agreement is the fact of a hereditary substance that is over and above all the other elements of the body, and upon the phenomena of heredity.

Darwin postulates a kind of phenomena, the so-called xenia, or the infection of the Germ Plasm, to account for certain deviations from the normal type. Given cases of reversion in the breeding of animals are cited as illustrations. For instance, a mare is bred to an ass, then next again to a horse. The second colt had many of the characteristic markings of the ass. However, it is averred that such cases do not occur sufficiently frequent and with sufficient regularity to make of them items of valid evidence as proving heredity. In fact it is now doubted as to whether the hereditary Germ Plasm was at all thus infected.

However, all observers are agreed that the Germ Plasm can be and is frequently infected by an external influence. But while this is true it is necessary to recognize another fact that is intimately related with the science of heredity, or perhaps more properly speaking, parallels heredity, while, at the same time, it stands quite outside of the facts that go to make up what shall be known as heredity in fact. An intermixture of alcohol in the blood of the parents does without doubt, produce a deleterious effect upon the ovum and sperm cell, which will lead to an abnormal development resulting in more or less marked deformities. In syphilis, the father, as well as the mother, can transmit the disease to the embryo. The transmission of carcinoma and epilepsy is accountable for along the same lines of reasoning. In transmission alone we have to deal with the presence of a chemical or parasitic toxin in the blood stream of the parents which, as the embryo is being nourished, is transmitted to it and the deleterious effects are manifested in the abnormal nutritional expressions. But it is as well understood that the stream of alcoholic blood can be rendered pure by cutting off the source of supply and subsequent breedings be entirely free from its toxic effects.

These facts are sufficient, I think, to illustrate the line that separates simple transmission from heredity in its true sense. When once the Germ Plasm becomes infected, is made abnormal in its constituent elements, then whatever its products are can be nothing more or less than hereditarily defective.

Tuberculosis, it is affirmed, can be transmitted, or more correctly speaking, the toxins affecting the blood stream of tubercular parents will so alter and modify the nutritional factors of the embryo

as to afterwards render it peculiarly susceptible to tubercular infection. The hereditary Germ Plasm can, during all this time, be absolutely normal, and if, at such time when the toxins above mentioned are eliminated from the blood stream of the parents a subsequent embryo not being the subject of the abnormal nutrition peculiar to the tubercular toxemia will, entirely escape future tubercular infection. This will explain the apparent anomalies that are constantly before us in families where one or more of the children escape tuberculosis while all the rest suffer its effects. If this view can be accepted as correct it will serve a further purpose for us in differentiating between such cases of tuberculosis as are amenable to curative treatment and those who die in spite of whatever measures are instituted for them.

There is yet another theory of heredity, quite more modern than those I have quoted, which is attracting the attention of scientific thinkers both in Europe and in this country which, if once fully understood, will widen the view to the extent that much which is now a perplexing mystery will be brought into the form of a reasonable working hypothesis. I refer to the theory of the late Professor Cope, of the University of Pennsylvania.

Cope's theory contains the following broad, fundamental principles, which he has so ably defended. in his book entitled "Primary Factors of Organic Evolution." (1) That life and consciousness preceded organization. (2) That the survival of the fittest must be explainable on other grounds than was supplied by Darwin, viz: Feeding, breeding and battle. Cope has given us a detailed history of the *origin* of the fittest which he postulates as the result of intelligent selection. In short it may as well be called the dynamic theory. The Germ Plasm is the sole repository of hereditary characteristics and traits of each successive generation. It is the germinal matter in which certain resident forces are stored, and it is to these forces that we are obliged to look for the blastogenic functions of the Germ Plasm.

Foreign or external influences or stimuli pass first through the somatic or body cells, by a process of intracellular pan-genesis reach the Germ Plasm. Now any modification of the molecular constituents of the Germ Plasm by the accidental presence of external influences or stimuli will in a greater or less degree, influence the operation of the resident forces.

The ultimate conclusion of Cope's theory amounts to this, that

variation of character and form are not promiscuous and multifarious, but that certain definite directions are followed and these within a limited scope.

Now we have two principal forces to deal with, viz., acceleration and retardation. With the latter the pathologist is mainly interested as it is in this field that he looks for the deflections from the normal type and trend. In this theory we will have to take cognizance of Life, Consciousness, Acceleration and Retardation, Bathmism or Growth Force and its location. Use and effort shall determine the direction in which these forces act and the resultant product is governed thereby.

Personally, I think the theory of Cope is worthy of very careful consideration as in it there can be traced out, without failure, the line that separates heredity in its true sense from simply transmission. It is to emphasize this point that I have written this paper. The very loose and unscientific way in which abnormal characteristics are usually dealt with by the medical man has, in the past, been the means of erroneous conclusions which, as a matter of fact, resulted in detriment to the object under observation and lent encouragement to lax methods of observation.

The attitude of the physician towards a patient that is the subject of transmitted syphilis is altogether different from what it must be when the hereditary Germ Plasm has become altered in its molar relations and construction by the virus. In the first instance the patient is just as certainly amenable to curative treatment as if he were the object of a primary lesion and all that follows, while in the latter we can only hope for an amelioration of the condition and certainly not for anything that resembles restoration.

I do not think that it is going too far or expecting too much when I assume that this idea will be interpreted into a law which will guide our application in practice in these cases. If it holds good in syphilis, there seems to be a reasonable certainty that it will hold good in many other diseases.

That there is some influence from the parent to the child that will, in later life, determine its susceptibility to tuberculosis is an observation that needs no argument to sustain the contention. But here is where we are obliged to draw the line between heredity and transmission.

Complications may, and will, no doubt, arise in which both heredity and transmission are present in the same subject, but at present

we are only concerned in bringing out a single idea, and, therefore, will not attempt a discussion of the possibilities arising from a complicated condition in which the mixture occurs.

The dynamics of heredity reside in the little speck of protoplasm which constitutes the Germ Plasm of the ovum, before even the body of the ovum is developed. In it there is to be found, and may be seen with the naked eye, a very intricate microcosm of psychic life. At this stage of the development of the ovum there is, as yet, but the merest suggestion of a physical basis. It is but just beginning to construct a body. It seems to rest upon the very border line of free consciousness and physical embodiment, simply undifferentiated protoplasm. The vastly predominating phenomena can be called nothing else than psychical phenomena or consciousness. There would almost seem to be consciousness of self; but—and note the fact—as the process of body building goes on the psychical phenomena decrease in activity. It may be said that it descends into matter for the purpose of reproducing itself, or for self amplification, in order to rise to a higher plane of life that stretches away before its inherent possibilities. Though submerged, it seems to be, in a sense, in the process of body building, the psychic activities of the germinal protoplasm reappear finally in the gray matter of the matured brain.

BIBLIOGRAPHY.

The Primary Factors of Organic Evolution	Cope
The Germ Plasm	Weismann
Synthetic Philosophy	Spencer
Evolution	Stockwell

Cholelithiasis.*

BY

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A consideration of the presence of gall stones in the biliary track leads into a subject presenting many pathological phases, to some of which the concretions may owe their existence, while others may have arisen as a result of mechanical injury produced by the stones. Given—a normally healthy gall bladder and ducts it is generally believed that calculi would not be found. Their presence would then be preceded by some disease producing factor which becomes responsible for their existence. Infection finding existence through

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the common duct from the intestine as well as through the blood current is a prolific source of disease. Both the colon and typhoid bacillus are regarded as prime factors in the formation of biliary stone, by setting up a catarrh of the bladder and ducts—the diseased epithelium together with fat globules becoming nuclei for stones.

It has been found that the gall bladder is a frequent habitat for the typhoid bacillus. Pratt reports its presence in 21 out of 30 autopsies on persons dead of typhoid fever. The typhoid bacillus may remain in the gall bladder for many years after it has disappeared from other organs. As the gall bladder in typhoid fever usually contains the typhoid bacillus and cholecystitis is relatively rare, the real cause of the latter disease must be sought elsewhere. While much has been learned in the past score of years pertaining to the cause of gall stones, the fact remains that no common factor is applicable to all cases. The researches made by Austin leads him to conclude that cholesterine gall stones are the result of a deficiency of glycolic acid. Vaughan, Harley, and others have made some investigations looking to the dissolving of gall stones in situ. Large gall stones were inserted into the gall bladders of healthy dogs under aseptic conditions, and in periods varying from six months to one year they had entirely disappeared, thus seeming to prove that the normal bile of the dog will dissolve cholesterine stones. Gall stones were also inserted into gall bladders in which a cholecystitis was artificially produced with the result that the stones remained unchanged. The conclusion is that in the cases of induced cholecystitis there was a deficiency of bile acids which accounts for the stones persisting while in the healthy bladder the stones were dissolved by the normal acid of the bile. Whether the persistence of the stones is here due to the want of bile acid alone or to some other factor associated with the inflamed bladder lining must be partially determined by investigation through chemical aids. The symptoms of gall stones are often obscure and mistakes in diagnosis frequently leave the real offenders undiscovered. The fact that cholesterine and calcium salts are largely increased in pathological conditions of the gall bladder will account for the persistence of those forms of concretions during the continuance of the morbid process.

Disease of the gall bladder and ducts with or without stones is most frequently mistaken for diseases of the stomach. Is mistaken for renal disease, nervous affections, hysteria and not infrequently

for appendicitis, which latter affection is likely to co-exist in a large percentage of cases. Gall stones may remain for a long time in the gall bladder without attracting attention, and it is generally believed without producing symptoms. In many cases symptoms are no doubt overlooked or are accredited to some other supposed affection. Pain is a characteristic symptom and in a large percentage of cases is due to distention caused by obstruction to the outflow of fluid. This is especially true of the paroxysmal pain. Pain which is elicited by pressure results from cholecystitis and cholangitis with extension of the inflammatory process to contiguous tissues. Jaundice is not a common symptom. Eleven consecutive cases operated by the writer at St. Joseph Hospital had not become jaundiced. When it appears it may result from the presence of a stone in the common duct, though a stone thus lodged does not always produce jaundice owing to the elasticity of the duct being greater in the middle than at the extremities, and the bile is permitted to flow around the obstruction. Jaundice occurs from cholangitis in which the thickened mucus lining causes obstruction to the outflow of the bile. The presence or absence of jaundice alone is of little significance in determining the presence of stone. Inflammatory icterus is quite as common as the mechanical. One of our eminent surgeons in discussing the diagnosis states that "the presence of gastric disturbances—paroxysmal pains in the region of the gall bladder—tenderness in right hypochondrium, jaundice with pruritus, ashy colored stools, highly colored urine containing bile pigments, enlargement of the liver, and all those symptoms occurring in a patient beyond thirty and of sedentary habits, a diagnosis of cholelithiasis can be made with a great deal of certainty." But with a patient under observation no such combination of symptoms should be waited for. The welfare of the patient calls for a diagnosis and effective treatment while the morbid process is yet young. Before the engorged liver, the inflamed pancreas and the irritated kidney have resulted from the prolonged influence of the disease.

The ideal method of combating the disease would be found in effective prophylaxis. Undoubtedly much would be accomplished in the observance of proper hygiene and the adopting and maintaining of correct habits of living. The results following such a course would probably be improved upon, but little if any by any drug medication which might be added to it. Cholecystitis and cholelithiasis, always secondary affections, would thus be nipped in their incipency.

Acting on the reports of Austin that cholesterine gall stones are the result of a deficiency of glycolic acid it has been suggested that the administration of glycolate of soda would act not only as a prophylactic but as a solvent for stones already present. Having been absorbed from the stomach and intestine it is taken up by the liver, and entering the gall bladder dissolves the concretions. Until a comparatively recent time the only treatment advanced for cholelithiasis and its attendant evils was that afforded by internal medication to which might be added a sojourn at Carlsbad or a prolonged ocean voyage.

Medical treatment still has its strong advocates and numerous remedies are recommended as possessing curative powers. Most of the remedies prove quite as effective as does the half pint of olive oil so generally adopted by the laity and occasionally by the medical man who "pity 'tis 'tis true" certifies to the passage of large gall stones following the ingestion of the oil. S. Mintz (*Centralblatt für die Gesamte Therapie* Oct. '03.) is a strong advocate of medical treatment. He takes the position that the internal treatment of cholelithiasis has for its object not the removal of stones found in the biliary passage, but the cure of the inflammatory conditions of the gall bladder, ducts and adjacent peritoneum. This author holds that the absolute indications for surgical intervention are limited to such as perforation of the gall bladder in which the use of internal remedies is evidently without effect. In all other conditions he advises that internal remedies be given a first trial. The clear admission of such a learned internist that medical treatment does not aim to remove stones found in the biliary passages constitutes a forceful argument for surgical treatment. Anything short of the removal of the stone is not effective treatment. It is a foreign body and an irritant. It is frequently the abode of micro-organisms capable of kindling inflammatory processes in adjacent and remote tissues, endangering health and life. More and more is the affection come to be regarded as a surgical one. The indications for surgical treatment of the biliary passages does not depend upon the presence of calculi, which may be only an incident, if present at all. Cholecystitis and cholangitis with the resulting impeded flow of bile from the liver cells, present a legitimate field for timely and effective surgical treatment. Cholecystotomy with drainage should be the rule. A functioning gall bladder free from malignant disease should not be removed. There is no treatment so effective and at the same time so quick in results as thorough drainage of the entire

biliary track when the function has become crippled through inflammatory process. The well recognized rule that injured and overworked organs and tissues require rest while they undergo repair cannot be lost sight of in the proper treatment of an inflamed and thickened duct which serves as the sole conduit for the abnormal secretion of the largest gland in the body. By establishing drainage through the gall bladder a speedy emptying of the biliary tract is at once substituted for a tardy and impeded flow. If infection exists its further extension is thus limited while the ducts thus relieved of work have an opportunity to resume the norm. Any operation made for the relief of an inflamed and infected bile track which does not include subsequent drainage of the liver secretion does not give the patient the benefit of the most effective treatment. It frequently happens that small stones find their way into the gall bladder from the hepatic ducts in the first few days following the operation. They are swept along by the more rapid flow of bile consequent upon the larger outlet. The operation of cholecystectomy with ligation of the duct is an effectual barrier to this cleaning out process so much to be desired. The immediate suturing of the gall bladder and returning to the abdominal cavity presents the same objection. Theoretically the operation of cholecystenterostomy should afford the same relief as external drainage. But a permanent drainage of the gall bladder is not to be desired after the disease has been cured. The opening from the gall bladder into the intestine would invite infection, through bacteria as well as gross intestinal contents finding lodgment in the gall bladder.

A stone of very soft consistence located in the duct may possibly be crushed without incising the duct wall. Efforts in this direction must necessarily be limited because of injury to the duct which is likely to ensue. It is possible at times to push the stone out of the duct by gentle pressure between the thumb and finger. Failing to accomplish this the duct should be incised, the stone removed and effective drainage established until the incision is healed. In fixing the gall bladder to the abdominal wall the attachment should be sufficiently high to prevent dragging in assuming the erect posture and yet not so high as to occupy the area traversed by the normal descent of the liver in respiration. The possibility of a sinus persisting after cholecystotomy and drainage is remote. The union of the suture line on each side of the tube is practically insured if the region is kept free from contact with the biliary discharge.

In March, 1903, the writer utilized a rubber ice bag to catch the flow of bile by securing the bag over the end of the projecting tube with a cord. In about thirty hours the bag had become well filled the dependent portion was punctured and the bile emptied. The newly made opening was tied to be again removed when more bile would have again accumulated. The tube is removed about the tenth day. The suture line has then healed and will not be affected by the bile which continues to flow for the next two weeks or more. Later in the year of 1903, Dr. Graham reported a method which Dr. Geo. J. Cook, of Indianapolis, had used for a year or more, which consisted in tying a rubber condom to the drainage tube thus catching the bile without soiling the dressings. The desirability of controlling the discharged bile is readily apparent. The bag is outside of the dressing. The wound need not be dressed for a week or more. It means much in comfort to the patient who avoids lying in the sappy and bile-stained dressings during the first few days when discomfort is the rule. The chances of infection of the external wound are lessened. The healing process goes on more rapidly and the union is firmer, thus lessening the chances of subsequent hernia. The fact should be universally recognized that the waiting process in gall track disease is dangerous. Many patients have permitted the time to go by when their disease would have yielded promptly to effective surgery. These are the cases which the surgeon dreads most because of possibly being past relief. Yet the disaster which follows rarely fails to be accredited to the surgeon and his art. The fatal issue of the case depends many fold more upon the condition of the patient than does it depend upon the surgeon and his methods so long as he observes approved surgical principles. The diagnosis should be made early. Thorough and painstaking examination early in the disease would often disclose the real character of the trouble frequently overlooked. Gall stones which produce symptoms should be removed. The gall bladder should be preserved if its function has not been destroyed by atrophy, malignant disease or permanent occlusion of the duct. External drainage should be provided for the relief of existing cholecystitis and cholangitis.

*Accidental Surgical Cases.**

BY

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"Patroclus cut the forky steel away
And in his hand a bitter root he pressed,
The wound he washed and styptic juice infused
The closing flesh that instant ceased to glow
The wound to torture and the blood to flow."

From the days of Homer to the present time accidents and injuries have called forth the skill, the courage, the resources of mankind. From the time when primitive man seared the bleeding wound with the hot stone hatchet to the day of Lister, surgery has been in the process of evolution. Accidents and their results have been the principal stimulus to surgical progress.

At the present time we divide accidental surgical cases into the following varieties of injuries: Contused, punctured, incised, lacerated and gunshot wounds, burns and fractures. The time allowed will necessitate eliminating the treatment of a number of these conditions and confining ourselves to such minor surgical cases as come under the head of the different classes of wounds. Burns and fractures we must omit, unless the fracture complicates a torn and lacerated hand or limb.

Before the days of aseptic surgery, amputation was considered a conservative measure. But today I firmly believe that amputation, even of a finger, should be considered only as a last resort. A finger, a hand, or even an arm, may be crushed, the bones comminuted, the flesh a mass of lacerated tissue, and yet a useful member be made by careful, conservative surgery. It means lots of trouble to the surgeon, lots of time lost, no brilliant operation to enhance his reputation. But it means to the patient a member, even if stiff and crooked, that is a thousand times more valuable to him than any artificial contrivance could possibly be. If in doubt as to whether a member can be saved, the delay of a few hours or even of a few days, if it does not jeopardize the life or strength of a patient, may result in the preservation of a part that might have been thoughtlessly destroyed by immediate amputation. Nature is a wonderful surgeon if she only has half a chance.

The washing of wounds with strong antiseptic solutions I believe to be a mistake. The solution may perhaps remove a few of the germs, but the strong antiseptic destroys the resisting power of the tissues and leads to the very thing we desire to avoid, viz.: Sepsis.

*Read before the Northern Tri-State Medical Association at Toledo, Ohio, Jan. 10, 1905.

Even the use of sterile water, it seems to me, has often delayed the healing of a granulating surface. Frequency of dressing, unless there is severe sepsis, also is a thing to be avoided. Not only does it expose the wound to infection, but the removing of the dressings destroys the tender granulations that are filling up the space left by the tissue that is lost and are endeavoring to erect a barrier between the wound and the deadly pus forming germs.

The use of antiseptic powder is decried by some, but I believe that a powder containing the element iodine not only is a germ destroyer but a stimulant to wound repair as well.

I have selected the following cases as illustrative of facts I have tried to set forth:

Case 1. F. L. K., aged 28. The thumb of the left hand was crushed by a flying stick, thrown from a saw. The bones were comminuted, the flesh a mass of bruises and lacerated tissue. On holding up the hand the thumb fell over on the wrist. He absolutely refused an amputation or to take an anesthetic. The loose pieces of bone were removed and the remaining portions placed in as nearly their proper positions as possible. A few sutures were taken, the whole covered with antiseptic powder, dressed and placed on a splint. There was considerable pain the first night, but very little trouble after that time. The dressing was not taken off for ten days, and subsequently about once a week for five weeks, then the splint was removed. There was a thumb that at first appeared to be beyond any chance of saving. Today it is a good, useful member that the man would not part with for any sum of money.

Case 2. J. S., aged 19. This man's left hand was badly mangled by coming in contact with a gang saw. The posterior surfaces of the ring and middle fingers of the left hand were entirely torn away the full width of the fingers to the second joint. The little finger had the nail torn off and a jagged cut about half the length of it. The forefinger was only slightly injured. The bones of the two fingers were half removed as smoothly as could be. The distal metacarpal bone of the ring finger was entirely gone. There was little hemorrhage. The wounds were thickly dusted with iodosyl powder to stimulate granulation. Each finger was placed on a separate splint and dressed. This first dressing was removed at the end of five days. There was some suppuration, necessitating redressing every day for the next two weeks. In five weeks the fingers were entirely healed. Passive motion could not be made until the end of the sixth week, because of the delicacy of the scar

tissue formed. Of course the last joints of the ring and middle fingers are stiff but massage soon restored motion to the others. Looking at the palmar surface of the hand today, nothing wrong can be seen, but the backs of the fingers are badly scarred. An interesting feature of this case was the fact that the young man had contracted syphilis one year before, but had been under treatment during the whole of the time.

Case 3. F. A., aged 50. Little finger of left hand sawed off between first and second joints. End of ring finger sawed diagonally across, leaving a nice palmar flap. On the ring finger the flap was turned back and sewed in place. The skin of the little finger was drawn as nearly over the end of the bone as possible and sutured. The little finger healed first and left a first class stump. I have tried this procedure in a number of cases where the finger was cut square across. I usually clip off about one-fourth inch of the bone and sew the skin together. The results are exactly as good as though a regular amputation was done.

When amputation becomes absolutely necessary there should be no hesitation unless there is severe shock. Immediate operation gives the best results. Here conservatism in the saving of tissue should end. Often it is hard to determine whether apparently healthy flesh has not been devitalized by the crushing or jerking of the muscles and skin. An inch or two matters but little and a great many cases of sloughing of the flaps might have been avoided by going a little higher up at the first operation. Especially should the surgeon be cautious if an Esmarch bandage or tourniquet has been applied for any length of time. I once amputated a leg for tuberculosis of the ankle joint. At first it was thought the foot could be saved by a resection. An Esmarch was applied to the ankle but on cutting into the joint, amputation was decided upon. The flaps used were taken from the tissue under the bandage. Sloughing of the flaps, secondary hemorrhage and a subsequent operation were the result.

Case 4. R. S., aged 28. The left hand was pinched off just above the wrist by being caught in a planing machine. When I first saw the man one of the factory hands had tightly knotted a handkerchief around the arm and there was no hemorrhage. One-fourth grain of morphine was given hypodermically and the man removed to his home. The arm was amputated about half way to the elbow and in a short time he was back at work.

To show the wide range of cases coming to a general surgeon,

I will cite two more cases. Then I will leave the subject to the discussion of those who are more competent to handle it than myself.

Case 5. J. B., aged 40, was drinking in a saloon with some of the boys. A bet was made that he could not break a window glass with his bare fist. He won the bet, but noticed that the middle finger of his hand dropped down and could not be straightened voluntarily and that there was a small cut over the knuckle. He came to my office and I found that the extension tendon had been severed. It was necessary to cut down the back of the hand for an inch before the severed end could be found. By clamping an artery forceps on the tendon we were able to approximate the severed ends and sew them together. The finger was placed on a palmar splint and left for a week before redressing. At the end of four weeks there still remained a small fistulous opening. I had used silkworm gut and it was necessary to cut down and remove the sutures. There was perfect union and the finger was as good as ever.

Case 6. W. H., aged about 45. This man had been run over by a heavy hose wagon and apparently one of the horses had stepped on his head. He was absolutely unconscious. There was a large scalp wound on the right side of his head. The cut ran down through the ear and into the cheek. Part of the scalp was gone. There was a small scalp wound on the left side. Two ribs were broken. Scarcely any pulse was perceptible. Stimulants were administered and the pulse improved. While the scalp wounds were being sewed up, he partially recovered consciousness. At that time no pulse could be felt. The heart beat was very rapid. Stimulants and artificial heat brought a small pulse. He complained of a desire to urinate but could not. I drew about a pint of nearly pure, red blood from the bladder. The accident occurred at about 9 a. m. and the man died at 1:30 the next morning. On post mortem examination we found the abdominal cavity filled with blood. The ends of the two ribs had been jammed into the liver about two inches and had then sprung back into place. Both kidneys looked as though they had been struck by a sand bag. Now, should we have opened the abdomen and tried to find the source of hemorrhage or did we do right in treating him expectantly? The outcome would undoubtedly have been the same. The hemorrhage from the liver might have been stopped but the kidneys were apparently irreparably damaged.

Since writing the above a rather peculiar and interesting case came to my notice.

Case 7. E. F., aged 31. Has been subject to epileptic attacks.

Had one in September. Usually after an attack is unconscious for about an hour, then recovers his normal condition. On December 31, while driving along a country road, he had a seizure and fell backward into the wagon with his feet hanging over the seat. The horses ran away and went about a mile before being stopped. Some neighbors carried him into a house and summoned a doctor. He remained unconscious for about two hours. When the physician arrived he injected something into the man's wrist and he revived. He went to his home and the next day was apparently all right, except for a slight headache. On January 2, (two days after the accident) I was summoned and found the man in bed with an excruciating pain in his head. He was slow to answer questions, his pupils responded slowly and he slept most of the time. The pulse was regular but only 60 to the minute. Temperature normal. The following morning three grains of calomel were administered and cold applied to the head. The pulse was 50. Temperature subnormal. His other symptoms were intensified. The afternoon of the same day he lapsed into absolute unconsciousness, with stertorous breathing; pulse 50. The right pupil was fully dilated, and the left small with no response to light. The bowels had not yet moved. Two drops of croton oil were ordered every two hours till the bowels acted. Later in the evening partial paralysis of the right arm and leg appeared. Operation was considered but dismissed as useless. About midnight the bowels began to move and four watery passages resulted. The next morning he began to rouse. The pulse reached 100 and the temperature 99.5 degrees F. From that on recovery was uninterrupted. What did we have? Simple congestion, concussion or hemorrhage?

Thanking you for your kind indulgence, I will now leave this subject for your discussion.

SOCIETY PROCEEDINGS

The Northern Tri-State Medical Association.

The above named Association held its thirty-first semi-annual meeting at The Zenobia, at Toledo, Ohio, on Tuesday, January 10, 1905. The meeting was called to order by President G. W. Spohn, of Elkhart, Ind., with an attendance of thirty-five members and guests. Minutes of the previous meeting were read and approved.

A paper on "*Accidental Surgical Cases*" was presented by Dr. A. W. Chase, of Adrian, Mich. (The paper appears in full in this issue.) In discussion, Dr. Shumaker, of Butler, Ind., said he thought many failures were due to unnecessary washing of wounds with antiseptics, picking out foreign bodies like cinders, etc., and frequent changing of dressings, and branded such measures as meddlesome surgery. * * Dr. Frank Broughton, of Waterloo, Ind., did not agree with essayist and thought antiseptic powder acted as a foreign substance and caused much irritation. He believed in washing wounds with solutions of bichloride, carbolic acid, or lysol. While we cannot destroy all bacteria we can destroy some, being careful not to injure the tissues. He thought as much foreign matter as possible should be removed from wounds. Where workmen are injured he sometimes used coal oil to remove grease, etc. * * Dr. Harbster, of Toledo, reported a case of thumb injury where good results in saving a stump brought curses on him by the patient, for the reason that by virtue of the usefulness of the stump he could secure no benefit from the company in which he had accident insurance. * * Dr. Chase closed the discussion, giving his opinion that if powders were properly used in properly selected cases, one would get the best results in preference to washes.

Dr. Robert S. Walker, of Toledo, Ohio, read the next paper on "*Errors in Treating Syphilis and How to Correct Them.*" The Doctor's paper was very complete. He gave his method of treatment in the second and third stages only, in a clear and concise manner. He said he thought mercury necessary in any stage of the disease but particularly in the second stage. He thought failures in treatment were due to the fact that physicians do not give sufficient study to each and every case, and therefore they can not properly prescribe. The cases, as a rule, come from an inferior

class and we are loathe to spend our time and thought for the patient's best interests; we give them a superficial examination and prescribe offhand. These patients stay away for some time and return no better. Every case is a law unto itself. Dr. Shumaker, of Butler, Ind., discussed the paper and raised the point that mixed treatment is usually the best in the second stage. * * Dr. J. North, of Toledo, Ohio, thought mercury was the best remedy for syphilis but not the only drug we have. Good results are obtained from iodide of mercury because it keeps the mercury in solution. Potassium iodide has little or no effect when mercury has not been previously administered. * * Dr. Budd Van Sweringen, Ft. Wayne, also discussed the paper, and made the point that treatment is oftentimes not continued for a sufficient time after the active symptoms have subsided. * * Dr. Walker closed. He doesn't give iodides in the second stage except in cases of exacerbations. Iodine does not control the disease but merely aids in elimination.

"*Surgery of Gastric Ulcer*" was the subject of the next paper, read by Dr. Julius H. Jacobson, Toledo, Ohio, in which the point was made that diagnosis should be prompt and then surgical treatment adopted. No other treatment yields as satisfactory results. * *

Dr. Chas. E. Eisenbeiss, of Elkhart, agreed with the essayist that all cases of gastric ulcer should be operated as soon as diagnosed.

* * Dr. M. I. Rosenthal, of Fort Wayne, thought prompt surgical intervention of ulcer would lessen occurrence of gastric carcinoma. The operation is not attended with more danger than many other abdominal operations, and can be performed quickly. The dangers are shocks, leakage, vicious circle and hemorrhages. The site of anastomosis should be from the posterior surface of the stomach to a point in the duodenum ten inches from the pylorus. The omentum should be stitched to the stomach to insure firm anchorage of the parts. * * Dr. Lewis A. Levison, of Toledo, thought cases of recurrent and chronic ulcer should be operated. The symptom of hyper-chlorhydria is not considered of so much value as formerly, occurring in only 17% of cases. Peptic ulcers are sometimes a sequelæ to operation. * * Dr. Theo. A. McGraw, of Detroit, said that in his experience, gastric ulcer and perforation will be simulated by acute pancreatitis and cited a case in illustration. Cases of hemorrhage of the stomach should not always be operated, but treated expectantly with adrenalin and astringents. He thought the statistics of high mortality in operated cases was due to delay

in diagnosis and especially delay in operation. * * Dr. Smith, of Toledo, said he did not always find gastric ulcer so easily recognized. Cases of small perforations without leakage do not present pronounced classical symptoms, and illustrated by citing cases. * * Dr. Budd Van Sweringen, of Ft. Wayne, thought it was very difficult to make a diagnosis of malignancy in the stomach. One does not always know what one will find on gastrotomy. * * Dr. J. C. Fleming, of Elkhart, cited several cases of recovery in hemorrhage of the stomach where the expectant plan of treatment had been pursued. * * Dr. McGraw agreed that obstruction of pylorus was easy of diagnosis but not so with cancer. * * Dr. Johnson closed by answering Dr. Levison's point of objection with the statement that peptic ulcers rarely occur in posterior-enterostomy, but are very liable to occur in the anterior operation.

This concluded the morning program and the Association adjourned until 1:30 P. M., after the following committees were appointed:

Finance Committee:

JOHN NORTH, Toledo, Ohio.
I. J. BECKNELL, Goshen, Ind.
A. W. CRANE, Kalamazoo, Mich.

Membership Committee:

W. F. SHUMAKER, Butler, Ind.
E. T. MORDEN, Adrian, Mich.
W. J. GILLET, Toledo, Ohio.
JAMES A. DUNCAN, Toledo, Ohio.

Board of Censors:

BUDD VAN SWERINGEN, Fort Wayne, Ind.
J. C. FLEMING, Elkhart, Ind.
J. H. JACOBSON, Toledo, Ohio.

Fort Wayne Medical Society.

Meeting of Tuesday, November 8, 1904.

Meeting called to order by President Morgan with forty-five members and visitors present. Minutes of previous meeting read and approved.

PAPERS:—"The Organization of an Anti-Tubercular Crusade in Fort Wayne," was the title of a paper presented by Dr. George W. McCaskey. He said that tuberculosis is the scourge of the civilized world, but that the general public and some members of the profession seem to think that it is one of the evils which must be patiently en-

dured. No one can be a victim of the disease unless the specific germ which causes it has been implanted in the body through inhalation or ingestion. If the civilized world could breathe pure air and eat pure food and drink pure fluids tuberculosis would disappear in a single generation. Tuberculosis causes more deaths in Indiana than cancer, Bright's disease, influenza, diphtheria, croup, dysentery, diabetes, malaria, reumatism, measles, scarlet fever and smallpox combined. In 1902 one-eighth of the total mortality in Indiana was due to tuberculosis. In Allen County during the same year 115 deaths out of a total of 946 were due to tuberculosis. Valuing a human life at \$10,000, the actual loss of life in Allen County in that year amounted to more than one million dollars. If we add to this the loss of time during which the individual is unable to work, the expense is much greater, and in considering the subject of tuberculosis as a pure business proposition serious thought is demanded of every individual who has the welfare of the community at heart. There should, however, be higher motives than these to actuate human endeavor in such a serious matter. The disease is propagated by the sputum and it is necessary to destroy this from all cases. This can be accomplished by awakening public sentiment as to the necessity for action. Anti-tubercular societies, whose business it is to educate the public, and the existence of State hospitals for the treatment of tuberculosis, are some of the means for accomplishing the desired end. The precise method to be adopted in fighting tuberculosis is a question to be decided by the local conditions. Organized effort on the part of the medical profession and such of the lay public as can be induced to take interest in it is essential, and a campaign of education is required in order to produce results. Properly constructed circulars of information which may be gratuitously distributed, and well written articles for the public press, and public lectures, are means to this end. The essayist recommended that a committee of fifteen, eight of whom shall be physicians and seven lay men, with power to increase its own number to twenty-five, appointed by the President of the Society. He suggested that the local Society devote one or more meetings to the subject of tuberculosis and that the public be invited to attend such meetings. (Dr. McCaskey's paper appeared in full in the January number of the *Journal-Magazine*.)

On motion of Dr. B. Van Sweringen and amended by Dr. G. L. Greenawalt, the President appointed a committee such as suggested

by the essayist, and included in the committee the members of the City and County Boards of Health, the officers of the Visiting Nurse League, and the executive officers of the Associated Charities.

"*Cholelithiasis*" was the title of a paper presented by Dr. E. J. McOscar. (The paper appears in full in this issue of the *Journal-Magazine*.)

Dr. M. F. Porter opened the discussion by saying that to crush a stone within the common duct or gall bladder is a much more dangerous procedure than operation and removal through incision. The danger attending a continuation of cholelithiasis is in producing disease of the kidney. It is because of the presence of the foreign body that the local irritation produced that the germs get in their work. Dr. Porter said that the majority of his cases had been Germans and mostly women. Most of the cases were past middle life, and a large number had been sufferers from hemorrhoids, or fistulae or fissures.

Dr. G. W. McCaskey said that is is when we get infection with gall stones that we have stomach irritation. All cases of cholelithiasis need not necessarily come under the knife of the surgeon, as many cases are known to recover without the assistance of the surgeon, or at least the patient has reached that stage where he may be said to have made a recovery.

Dr. B. Van Sweringen said he thought gall stone cases should be operated as soon as possible, providing there is no unusual risk other than the gall stone operation. In a consideration of these cases we must take into account the danger of gall stones producing malignancy.

Dr. G. L. Greenawalt said that bacteria are not always the cause of gall stone disease. With a proper diagnosis early operations are the best.

Dr. S. G. Hollingsworth asked for a withdrawal card, and on motion the same was granted.

Drs. J. C. Wallace, B. Van Sweringen and S. H. Havice were appointed a program committee for 1905.

Adjourned.

J. C. WALLACE, Sec'y.

Meeting of November 22nd.

Meeting called to order by President Morgan with thirty-five

members and guests present. Minutes of previous meeting read and approved.

CLINICAL CASES:—*A Case of Ovarian Cystoma With Long Pedicle and Twist*, was reported by Dr. B. Van Sweringen. The patient, a girl, aged twenty-one, had pain in the lower part of the abdomen for a number of years, the attack being colicky in character and on the right side. In July she had an attack of pain on the left side, similar in character and duration as those previously experienced, which came on suddenly and disappeared suddenly. Yesterday morning at nine o'clock she had another attack. The case was seen at noon when a hypodermic injection of morphia and strychnia was given to control the pain. Palpation revealed a tumor on the left side, soft in character, which on operation in the afternoon proved to be an ovarian cystoma with long pedicle and twist. Tumor was of the right ovary, with a long pedicle permitting the tumor to lie on the left side. There was one complete twist to the left. No adhesions. (Specimen exhibited.)

A Case of Obliteration of the Cystic Duct and Occlusion of the Common Duct from a Single Gall Stone and Attending Inflammatory Growth was reported by Dr. Maurice I. Rosenthal. The patient was extremely jaundiced and had been passing clay colored stools but had experienced no pain in the region of the gall bladder. When operated numerous adhesions were found, the cystic duct being obliterated by the action of one single gall stone. The common duct was entirely occluded by an inflammatory growth involving the same.

In commenting on the case Dr. M. F. Porter said that it is a very common thing to have an obliterated cystic duct where there is a single stone in the gall bladder for a long time. It is rather unusual to have obstruction of the common duct without distention of the gall bladder.

PAPERS:—"The Treatment of Epilepsy" was the title of a paper presented by Dr. W. W. Carey. He said that the causes are predisposing and exciting. Heredity, sex, age and alcohol are some of the predisposing causes, while trauma, gastrointestinal disorders, lead poisoning, renal diseases, menstrual disorders, masturbation, pregnancy, congenital brain defects and syphilis are the principal exciting causes. Treatment is divided into three general heads: General, medicinal and surgical. General treatment includes regulation of the patient at all times, including regulation of his diet, habits and exercise, as well as controlling his mental and moral environment

as much as possible. The medicinal treatment involves the administration of such remedies as will prevent the attack or limit the severity of the attack. Surgical treatment includes the determination of the cause, as to whether peripheral or central, and the removal of the same if possible. No one remedy will cure all cases of epilepsy. The drug treatment resolves itself into some form of the bromides to the exclusion of almost all other forms of treatment. Such other drugs as iodide of sodium, chloral, nitroglycerine, zinc and iron are sometimes administered. A combination of the bromide of sodium and the iodide of sodium is very satisfactory and should be administered twelve hours previous to the expected attack, and the dose doubled twelve hours later if the attack has not followed. The drug is best administered on an empty stomach. As the hour of administration is important a record of all seizures should be made so that we may learn to anticipate the period when an attack is expected by administering a good dose of the bromides some four or six hours previously. If epilepsy follows trauma, then the quicker the operation the better. In the treatment of epilepsy the treatment depends largely upon details. An institution is the best place for epileptics, and Indiana should have a home for its epileptics.

In opening the discussion Dr. C. R. Dancer said that it is best to keep epileptics employed, and employed at something in which they take an interest. Attention to the habits of the patient generally has a very beneficial effect in the prevention of seizures. Believes an institution is the only place for the epileptics, but if he had a very dear friend that had epilepsy he would prefer allowing him to have seizures in preference to giving him bromides which are sure to produce bromism.

The paper was also discussed by Drs. B. Van Sweringen, E. J. McOscar, C. B. Stemen, M. I. Rosenthal, Wm. Enslen, H. H. Gordon, Mary A. Whery, H. O. Breuggeman, M. F. Porter, K. K. Wheelock, A. P. Buchman and G. L. Greenawalt, who considered the phase of the paper relating to the establishment of an Indiana home for epileptics.

"*Some Complications in Appendicitis Operations*" was the title of a paper read by Dr. Maurice Rosenthal in which he referred to such complications as fecal fistula, hernia and bowel obstruction, sepsis, gall stones, phlebitis and malignant growths within the abdomen in connection with the appendicitis operation. His paper was based upon experience in three hundred appendicitis operations. Owing to the lateness of the hour the paper was not discussed.

The President appointed as an anti-tubercular committee the following: Drs. G. W. McCaskey, M. F. Porter, L. P. Drayer, A. E. Bulson, Jr., B. Van Sweringen, E. J. McOscar, W. D. Calvin, and G. L. Greenawalt to represent the medical profession; Mrs. J. B. Pellens, Mrs. Jos. Lohman and Miss Schatzer to represent the Visiting Nurse League; Mr. J. D. Bond, Mr. O. E. Moehler and Mrs. Guild to represent the Board of Charities; Dr. Carl Proegler and Dr. A. H. MacBeth to represent the Boards of Health; Mrs. Katherine Hamilton, E. A. K. Hackett, Alexander Johnson, Samuel Foster, Mrs. R. S. Robertson, Mrs. S. B. Bond, Mrs. Susan Hoffman, Mrs. Chas. B. Woodworth and W. H. Shambaugh to represent the public at large.

On motion the committee was appointed to arrange for an open meeting on December 20th.

Adjourned.

J. C. WALLACE, Sec'y.

Meeting of December 6th.

Society called to order by President Morgan with thirty-three members and a number of invited guests present.

PAPERS:—"Hereditry" was the title of a paper presented by Dr. A. P. Buchman. (The paper appears in full in this number.)

The discussion was opened by Dr. K. K. Wheelock who said that the first important step in opposition to Darwin's theory of pangenesis was taken by Moritz Wiesman in his memoirs on differentiation of sex. August Weisman, in a paper published in 1893, adopted Nussbaum's theory. Nussbaum pointed out that the germinal cells from which the sexual products arise, are divided off very early from the other cells of the embryo and undergo very little alteration. Hence he concluded that some of the germ substance is taken over from the ovum and preserved without alteration to become, by giving rise to the sexual elements, the germ substance of another generation. Weisman insists that the whole nature of the animal or plant depends upon its germinal substance, and that the reason why the offspring is like the parent is that in every germ blast some of the germinal matter is preserved unchanged. He calls this view the theory of the germ plasma. He points out that this theory is inconsistent with the theory that parental characteristics acquired through external influence are transmissible to the offspring. Nussbaum and Wiesman lay great stress upon the separation of the cells of the embryo into two kinds: first, the germ cells which are con-

verted into the sexual elements; and, second, the somatic cells which form the body. The germ-cells descend divided from the ovum and have the power to reproduce a whole organism, while the somatic cells do not. Wiesman's theory is not supported by histological fact, as pointed out by Romke, Minot, and others. Minot says: "Since the chromatin is the characteristic of the nucleus and since spermatozoa consists in some cases almost exclusively of chromatin, it is probable that chromatin is the essential factor in the function of heredity." The fact that the offspring of Hebrews are born with a prepuce and are circumcised after birth the same as in the male parent, a practice that has followed for ages, is sufficeint to show that external influences have no definite effect on offspring. The general law of heredity "Like produces like or the likeness to some ancestor" is the main one for us as physicians to look upon. According to the biologic law, living things tend to reproduce their characteristics in their offspring. A tuberculosis child of a tuberculous mother becomes so either in utero or by infection after birth. A tuberculous father does not infect an ovum at the time of impregnation. Germ plasma may be altered by external influences, chiefly, if not almost entirely, through the mother.

Dr. E. J. McOscar said that it was a recognized fact that certain environments present before birth show results in a child after birth. As the development of the child depends upon the quality of the blood stream, anything which influences the blood stream of the mother will influence the development of the child. That certain mental states of the mother bearing a child in utero will have their effect upon the development of the child seems to have been conclusively proven time and again.

Dr. M. I. Rosenthal said that after the ovum has been impregnated there is a doubt as to whether there is any change in the ovum through external influences.

Dr. M. F. Porter said that the physical or mental characteristics of the child cannot be changed by any prenatal influences, for the elements which go to make up the physical or mental condition are there at the time the ovum is impregnated and remain unchanged.

Dr. C. E. Barnett said that he did not believe tuberculosis is an inherited disease, though it might be possible to inherit a tendency to the disease through lowered vitality, and that environment after birth would then be responsible for the development of the disease.

Dr. W. P. Whery said that in the general law of heredity accidental characteristics are not transmitted while the acquired are. Instincts

are very often transmitted. According to the general law of heredity there is a tendency to variety, and this is exemplified in every living thing.

In closing the discussion Dr. Buchman said that acquired heredity and transmission are the same. The toxic elements passing through the embryo change it, and this he calls transmission.

The election of officers for 1905 resulted as follows: President, Dr. L. P. Drayer; Vice-President, Dr. Maurice I. Rosenthal; Secretary, Dr. J. Clifford Wallace; Treasurer, Dr. W. P. Whery; Censor to serve on the committee for three years, Dr. K. K. Wheelock. On motion of Dr. Porter, and duly carried, it was decided to give the Secretary an honorarium of \$50.00 per year, with the proviso that he furnish a report of the proceedings of the Society for publication in the *Fort Wayne Medical Journal-Magazine*, or other medical periodicals as may be designated by the Society.

It was also decided by a vote that the meetings of the Society should, on and after January 1st, begin promptly at 8:15 p. m.

On motion, duly carried, a committee consisting of Drs. W. P. Whery, M. F. Porter, and A. E. Bulson, Jr., were appointed to confer with the officials of the Public Library with reference to the establishment of a department in the Public Library to be devoted exclusively to medical publications.

On motion, duly carried, the Secretary was directed to procure copies of the *Fort Wayne Medical Journal-Magazine* containing the proceedings of the Society and have the same bound. It was also decided by motion, duly carried, that the leader of a discussion be furnished with a paper of the essayist at least 24 hours before the meeting when the paper is to be read.

Adjourned.

J. C. WALLACE, Sec'y.

MEDICAL REVIEWS

Department of Medicine and Therapeutics

In Charge of George W. McCaskey, A. M., M. D.
 Professor of Clinical Medicine in the Fort Wayne College of Medicine, Ft. Wayne, Ind.

Diagnosis and Cure of Chronic Dyspepsia.

Schroeder, in *Lancet-Clinic*, says: "From the standpoint of the patient there is no symptom which seems more important than the 'pain in the stomach.' Were it not for this symptom the patient would cease seeking relief, after the list of dyspepsia tablets and nostrums has been exhausted.

To the physician this symptom may give much information, when considered in conjunction with other symptoms and conditions. But there is not any one symptom presented by dyspeptics that may vary so much in significance as pain, as far as diagnosis and prognosis are concerned. There is no one symptom which so stubbornly will resist inappropriate treatment of the condition.

Internists, meeting with a large number of cases of gastric ulcer know that the pain accompanying the condition is by no means always typical, nor is the tenderness always localized. On the other hand, there are a large number of patients with chronic gastritis who have suffered for years, and in whom the character of the pain and tenderness does not exclude ulcer. The proper use of the stomach tube alone may, in such cases, determine the diagnosis. The prompt relief by prompt mechanical, dietetic and perhaps medicinal treatment confirms the diagnosis.

If the use of the stomach tube is at times considered a fanciful method, we have the satisfaction that its great value for purpose of diagnosis has been abundantly proved. Its therapeutic application brings results which cannot be achieved by any other methods.

By the use of the stomach tube, and by the examination, chemic and microscopic, of the stomach contents and feces, we may decide earlier and with more certainty than by any other method whether a case of chronic dyspepsia requires surgical intervention or not.

The first step, then, in the cure of chronic dyspepsia, is the diagnosis. We should always remember that chronic dyspepsia is only a symptom. It seems that the very nature of the organ supposedly involved, the stomach, suggests to put medicine into it. That, in

the majority of cases, it is without results is proved by the many who finally ask for an examination.

A satisfactory examination cannot at times be made, unless the patient is placed in the hospital under observation. This is especially necessary where a careful examination of the feces is demanded. When once the proper diagnosis is made, the results of treatment are usually prompt and gratifying. Even if a diagnosis of gastric or duodenal ulcer is made the patient will not readily accept the suggestion of surgical intervention unless his sufferings have been severe; it is the physician who must give relief by rest of the organ and medicinal and mechanical treatment is indicated.

Experience has proven that much can even in these cases be accomplished. There are many cases of gastric ulcer which after proper treatment by the internist, remain entirely free from symptoms.

The knowledge that ulcers and cicatrices may develop cancer would rarely determine the patient to an operation unless the proper medical treatment had failed to give relief. Indeed, I do not believe that most physicians would advise it.

That this does not include cases of chronic gastric ulcer with many recurrent hemorrhages, so that the patient is nearly exsanguinated and his condition critical, is self evident. But an early and thorough examination of the patient, and especially the use of the stomach tube for the diagnosis, will prevent the condition from passing, unrecognized, to this stage.

We should plead then for diagnosis in cases of chronic dyspepsia. We should not forget the paramount importance of the simple clinical means of arriving at a diagnosis, nor even neglect the very valuable, and sometimes the only, means—the stomach tube and the laboratory.”

Predisposition in the Etiology of Mental Disease.

Montyel, in *Journal d. Neurologie*, says: “In the etiology of mental disease predisposition plays a most important role. Without it insanity is very unlikely to develop, even when the exciting causes are in full play. The author, during an experience of thirty years, has paid great attention to this subject, and here formulates his conclusions. Predisposition to mental disease he finds congenital and acquired. Congenital predisposition occurs in three ways: by direct heredity of a neuropathic constitution, through the fecundating

congress, and through the state of the mother during pregnancy. Under the first head the author can only find neuropathy, consanguinity, and tuberculosis to be active in the parents. The condition of the parents at the moment of conception has long been recognized as capable of influencing the mental makeup of the offspring. As factors here he finds accidental inebriety, alcoholism, saturnism, tuberculosis, malarial infection and advanced age. As influences affecting the mother during pregnancy, which may give rise to predisposition to insanity, even when the parents are free from such tendency, he finds lively emotions, especially when sudden and terrifying, alcohol, lead, malaria, tuberculosis, abdominal trauma, hard work—especially when necessitating maintenance of a bent position—infectious diseases—especially fever and the beginning of an abortion, even when non-traumatic. The question as to whether a person born free can acquire insanity he answers in the affirmative. The following six causes he finds alone capable of causing such predisposition, and they acting only upon the sound brain cannot immediately produce insanity. These form three groups, an infectious one with typhoid fever and malaria, a toxic group with chronic alcoholism and saturnism, and a physical group with cranial trauma and insolation. Febrile and infectious delirium may be seen in any one predisposed or not, but its characters differ in the two cases, the predisposed showing special tendency to hallucinations and illusions. Tuberculosis, while capable of causing predisposition in the child, when present in the parent, he finds incapable alone of producing insanity in a person previously indisposed to it. The author by no means underestimates the importance of exciting causes, but affirms that even when predisposition is present, without exciting cause there will be no psychosis. But while predisposition alone may be incapable of producing a true psychosis, it nevertheless leaves its impress upon the character of the individual, and the degenerate is the result. The two fundamental characters of this unfortunate are insufficiency and disequilibrium, which gives the coloring, be it ever so variable, through the whole scale, from the idiot upward. Some one or more faculties may be decidedly above the normal, and the author indeed thinks that many of the great ones of the earth have belonged to this class, for normal persons do things in an average way only, and without those of abnormal or one-sided development few great things would be accomplished. As to the respective types of mental disease, due to congenital and acquired predisposition, the former he thinks especially produces the psychoses, having

little tendency to dementia, such as periodic insanity and paranoia, while in acquired predisposition he has only found the manias, meloncholias and confusion."—*Jour. Ner. and Men. Disease.*

DEPARTMENT OF SURGERY GYNAECOLOGY and OBSTETRICS

In Charge of Miles F. Porter, A. M., M. D.
Professor of Surgery and Gynæcology in the Fort Wayne College of Medicine,

Hepatic Drainage in Infection of the Biliary Tracts.

John B. Deaver (*New York Medical Journal*) says that suppurative cholangitis should be operated on before the infection injures the liver cells and before the retained bile has a chance to react injuriously upon the general organism. The presence or absence of gall stones is of no moment in deciding for early operation, though they are usually present.

Cholecystostomy is the operation of choice where the lesion is acute and the gall-bladder has been functioning up to the time of infection.

Excision of the gall-bladder can safely be performed in chronic calculous cholecystitis with an obstructed cystic duct.

Hepatic drainage must be provided for in all cases where infection is present or suspected—either through the gall-bladder or by opening the common duct or the hepatic duct.

Abscess of the liver is prevented and pancreatitis relieved by prompt drainage of infected bile-ducts.—*Med. Progress.*

Caesarean Section.

M. W. O'Sullivan (*Inter. Med. Jour.*) in view of the markedly improved results in modern obstetrics, thinks that the obstetrician who would perforate the head of a living child in utero places but a low estimate on human life. Where the indications are absolute operation should be performed at or before the onset of labor. When there is a relative indication it is best to allow the mother every chance to deliver herself, when, if the head still remains immovable above the brim, if it shows no signs of moulding or advancing, Caesarean section or symphyseotomy should be performed, instead of resorting to forceps or version.—*Med. Progress.*

(We doubt if there is a competent, progressive obstetrician in this

or any other civilized and enlightened country who will disagree with the first of the above propositions, and we hope that the same may be truthfully said of the last in the near future.—ED.)

Danger from Warts.

That warts and moles are not simple things to be ignored is proven by an article by Dr. W. W. Keen, of Philadelphia, Professor of Surgery in Jefferson Medical College, in which, from his large experience, he reports twenty-five cases of malignancy as illustrative of the danger of allowing moles and warts to remain undisturbed. All moles and warts are more or less exposed to traumatism and irritation, as a result of which they often increase in size and sometimes undergo malignant changes. The patient has usually become so accustomed to their presence that he is lulled into fancied security by their apparently harmless nature. The recent paper of Wilson and Kalteyer (*American Journal Medical Sciences*, November, 1903), in which 51 cases are reported, strikingly illustrates the danger of leaving such growths undisturbed until they grow. The treatment should be thorough excision before increase in size takes place, for when they begin to grow they are usually malignant.—*American Journal Surgery and Gynaecology*, Dec. 1904.

Sarcomatous Degeneration of a Uterine Fibroid.

Dr. Sturmdorf presented this specimen, together with microscopical sections. It was a typical example of this form of degeneration, and the speaker said that the occurrence of sarcoma as a direct degenerative change in uterine fibroids seemed to be established, but the genetic relation of the malignant to the benign elements of these tumors was still the subject of controversy. It was scarcely necessary, Dr. Sturmdorf said, to emphasize the grave prognostic bearing of the possibility of such a degenerative process.—*Medical Record*.

Some Studies in Asepsis.

C. Harrington calls attention to some of the fallacies attendant on modern surgical methods with reference to aseptic measures. Much stress is laid on certain pet procedures, while other matters of quite as much importance are neglected. Particular attention is called to the fact that many of the plans of washing the hands now followed do not produce asepsis. As the result of long-continued

experimentation, the author is inclined to believe that the best results come from using as a solution for the hands the following mixture: Commercial alcohol (94%), 640 c.c.; hydrochloric acid, 60 c.c.; water, 300 c.c.; corrosive sublimate, 0.8 gram. This mixture contains 60% absolute alcohol, 6% commercial (strong) hydrochloric acid, and 1:1250 corrosive sublimate. Now, 60% alcohol will destroy *Staphylococcus aureus* in four minutes; 10 % hydrochloric acid is equally effective; and 1:1000 corrosive sublimate will kill it in three minutes. Why a combination containing all three substances, but with lesser proportions of the acid and the salt, is so much quicker in its action than any one alone, is, says the author, an interesting question of physical chemistry. This mixture kills the *Staphylococcus aureus* in about ten seconds.—*Annals of Surgery*.

DEPARTMENT OF MATERIA MEDICA, THERAPEUTICS AND PEDIATRICS

In Charge of Budd Van Sweringen, M. D.

Professor of Theory and Practice of Medicine and Clinical Medicine in the Fort
Wayne College of Medicine.

Pseudoappendicitis and Membranous Enterocolitis.

It has often been a matter of conjecture whether or not there exists a relationship between appendicitis and enterocolitis. Potain and Bottentnit deny any connection between the two affections and in a statistic of 460 cases of membranous enterocolitis the latter authority only found one in which appendicitis occurred as a complication. Out of 53 cases of enterocolitis Dieulafoy was unable to discover any symptoms pointing to a diseased condition of the appendix, while on the other hand Robin admits a common origin of both maladies, considering them as an ultimate result of certain types of dyspepsia. In children, Hutinel has often seen an appendicitis enter upon the scene during the progress of an enterocolitis, while Vorbe has collected 32 instances in which the former infection resulted from a membranous enterocolitis. Lyon also upholds the *liaison* between the two processes and of 5 cases of appendicitis he records 2 in which the patient previously suffered from a membranous colitis. The diagnosis must frequently be a very delicate affair, either because the attack of pseudoappendicitis appears in the midst of otherwise perfect health, or on the other hand, when it arises during the course

of an apyretic chronic enterocolitis. The early symptoms very closely simulate a true appendicitis and consist of vomiting, tympanism and elevation of the temperature reaching as high as 39° or 40° C., while added to these we have a small and frequent pulse and a pinched facies. To add to the confusion, the greatest point of tenderness will be found in the region of the cecum and very naturally the diagnosis of appendicular inflammation is made. Such cases have been and are needlessly operated on, much to the chagrin of the surgeon, who finds a normal appendix but a considerable thickening of the cecum and ascending colon. These cases, if watched, will soon show the presence of numerous membranes, of a mucous nature, in the stools. De Langenhagen is of the opinion that true appendicitis is most infrequently met with in membranous colitis, but what is of ordinary occurrence are attacks of pseudoappendicitis, which are nothing more or less than pain localized in the ileocecal region due to an enterocolitis. These attacks of pain so frequent in membranous colitis have a maximum point of acute exacerbations, in a given portion of a large intestine, such as the sigmoid flexure, at the middle of or at the flexures of the transverse colon, or at the cecum. In the latter case the clinical picture will be much like that of appendicitis, so much so, that only an exploratory incision will reveal the true condition of affairs. The all-important question, therefore, is to differentiate between the two conditions and thus avoid an error in diagnosis. It is pathologically possible for the appendix to become involved in a membranous colitis, but under these circumstances a differential diagnosis may be made by detecting the presence of greatest pain of the 2 flexures of the transverse colon, these points being quite as tender to pressure as the region of the appendix. Beside, pain may be elicited over the entire course of the large intestine. These attacks of pain are more frequent in children than in adults, for young subjects show a greater reaction and in them alarming symptoms occur, such as fever, vomiting and pain predominating in the cecal region, so that nothing is lacking for a diagnosis of appendicitis. But in enterocolitis the pain is never distinctly localized to the right iliac fossa. And lastly, one should never neglect rectal examination which, as is well known, is one of the greatest aids in diagnosing appendicitis.—*Am. Med.*, Jan. 30, '04.

The Abuse of Water Drinking in Disease.

Morris Manges, of New York, in the *New York Med. Jour.*, Jan. 21, 1905, takes occasion to combat the all too generally accepted theory

that water should be used in large amounts in many diseases. In cardiac diseases he thinks the advice especially pernicious, as it is by the heart that the large quantities of water have to be eliminated and the increase in blood pressure which follows the ingestion of such amounts of liquid increases the danger of rupture of compensation.

Upon metabolism the effects are contradictory but the following may be accepted: The increased drinking of water does not increase the breaking down of albumins. It causes a greater excretion of urea but this does not depend upon the increased production of urea; it is only dependent upon a greater washing out of urea and this is only temporary. However, metabolism is increased and this increase takes place at the expense of the carbohydrates and fats.

Good effects are often seen in kidney cases following a reduction in the amount of water ingested, especially when the heart is beginning to fail.

He says that the practice of simply directing the patient to drink as much water as possible without considering the condition of the heart, circulation and kidneys, can not be too strongly condemned.

DEPARTMENT OF OPHTHALMOLOGY OTOLOGY, LARYNGOLOGY & RHINOLOGY

In Charge of Albert E. Bulson, Jr., B. S., M. D.

Oculist and Aurist for St. Vincent's Orphan Asylum, the Allen County Orphan Asylum and the U. S. Pension Bureau for Northern Indiana and Northern Ohio; Professor of Ophthalmology in the Fort Wayne College of Medicine, Fort Wayne, Indiana.

The Treatment of Otitic Septicemia.

B. Alex. Randall (*Jour. A. M. A.*, Nov. 26.) says that evidence of sepsis in middle ear inflammation may be present in the steeped temperature chart, and yet the signs of even phlebitis of the jugular or lateral sinus may be lacking, but the irritative symptoms of meningeal involvement may leave us in doubt as to whether anything more than irritation is present. In such cases radical intervention will not always be accepted, even if the aural surgeon feels impelled to offer it. It is here that we may still hope for benefit from medicinal means, and mercurials and salines and sweatings may do much to clear out the toxins from the system and prevent serious lesions which threaten. The antitoxic effect of quinia and permanganate of potash are probable but not proven, and the value of the anti-

streptococcic serum has apparently been greatly over-rated. Glycogen either by the mouth or hypodermically, has claims made for it equal to those which can be urged for the most potent remedies, but it remains to be proven how often it will equal or approach such expectations. In Dr. Randall's hands it has seemed valuable enough to warrant its further employment. He especially urges the frequent and full employment of enteroclysis in cases of otitic toxæmia as a remedy potent and general in its effect, while almost ridiculously simple in its employment. The temperature of the solution may be warm, medium or cold as inclination or condition of the patient dictates. The amount must vary from two or three ounces in an infant to a pint in some adults, in accordance with the capacity of the bowel. The introduction must be slow, with slight pressure, (a foot of elevation of the reservoir is enough), and the perineum may need to be supported for many minutes after the withdrawal of the tube if retention in the bowel is to be secured. Even if much of the fluid is lost its flushing of the lower intestinal tract is of great importance, and the amount of absorption is generally greater than might appear. With all of its simplicity it is probably as efficacious as most of our possible interventions, and in those cases where surgery must wait for clearer indications it may often forestall serious complications.

The Serum Treatment of Hay-Fever.

Dunbar's anti-pollen serum for the treatment of hay-fever has given excellent results with patients in all parts of the world, as evidenced by statistics collected by Lubbert and Lrausnitz (*Berliner Klinische Wochenschrift*). The serum is obtained from horses inoculated with the pollen of various plants, and it is used as a liquid and in powder form. So far a subcutaneous injection has not seemed advisable, and its use has been restricted to local application. Reports have been made on 285 patients from different countries, with 60% in which complete relief was given, 29% of partial cures, and 11% of failures. From the analysis of the failures it appears that in most of these cases the directions were not adhered to. The action of the serum is not curative, in the sense that recurrence of the attack is prevented, but its greatest value is as a prophylactic. Faithfully used during the attacks it quickly relieves the symptoms and cuts short the seizure.

Fort Wayne Medical Journal-Magazine

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EDITORIALS

Druggists Aid in Deluding the Sick.

With few exceptions, druggists, in order to meet the popular demand, carry a liberal supply of all patent medicines. Until recently the manufacturers of patent medicines, as well as the druggists themselves, have been content to merely advertise the places where these medicines may be obtained. Of late, however, a more active form of advertising has been inaugurated, which, while no doubt increasing the sales of patent medicines, may be considered a reprehensible practice on the part of the druggists who countenance the newer methods employed to increase sales. The plan essentially consists in advertising a patent medicine in such a way that the druggist unqualifiedly recommends it for the positive cure of the numerous affections in the treatment of which the remedy is claimed to be applicable. If the druggist happens to be one having an estab-

lished reputation in the community for fair dealing and the usual amount of business integrity, the recommendation so glaringly displayed in all the daily papers, with the statement that it is backed by the reputation of the druggist, unquestionably has its effect in deluding the public. That the remedies so advertised are generally useless in the treatment of the conditions for which they are intended, and frequently detrimental, is well known to the druggist, for no intelligent druggist is ignorant of the fact that the larger number of chronic ailments for which patent medicines are prescribed, such as consumption, Bright's disease, diabetes, etc., are incurable through the effects of any drug or combination of drugs. In fact these diseases usually do better without medication, and frequently show more marked improvement under judicious dietary, hygienic and sanitary regulations as prescribed by intelligent physicians. In guaranteeing certain patent medicines to cure these diseases the druggist is lending his support and influence to a species of deception and dishonesty which is reprehensible and should receive the condemnation of all thinking people and the medical profession in particular. Generally speaking, medical men, while opposing the patent medicine evil because it victimizes the people, are aware of the fact that there is a popular demand for patent medicines, and, it being an established custom for druggists to carry them, no particular objection is offered to such policy. They are, however, opposed to the policy which places the druggist's business integrity and reputation back of a venture which it is known is dishonest in intent. It would be a fitting reprimand if physicians who write prescriptions would use their influence toward preventing the prescriptions going to such druggists as are guilty of this evil. It perhaps would not cut off a large share of profit from the druggist if his prescription business was thus limited, but it would indirectly tend to give the public the impression that deception practiced in one instance is quite likely to be practiced in other instances, and that therefore the druggist guilty of the practice under consideration is unworthy of patronage in any line.

A. E. B., JR.

The Change in the Marriage Laws.

The State Legislature has passed a bill which provides that no license to marry shall be issued in Indiana except upon written and verified application, which shall set out full particulars as to the name, age, residence and physical condition of both the contracting parties, all for the purpose of placing it in the power of the clerk

to determine whether any legal impediment to the proposed marriage exists. These applications shall be made upon blanks to be furnished by the State Board of Health. No person who is an imbecile, epileptic, of unsound mind or under guardianship as a person of unsound mind, nor an improvident or indigent person, nor any person afflicted with a transmissible disease shall be allowed to marry. Should the clerk refuse to issue a license for any of the given reasons in the bill, the person making the application may resort to the circuit court to prove his or her right to a license. If persons go to another state for marriage with intent to evade the Indiana law, and return for residence to this state, the marriage shall be void. A fine of not to exceed \$500 is to be the penalty for falsely swearing to an affidavit when application is made for a marriage license. A person who knowingly solemnizes a marriage of persons who have not complied with the statute shall be subject to a fine of not to exceed \$500, while a clerk of a court who shall issue a license contrary to the provisions of the law shall be fined not less than \$25 nor more than \$100.—*Ft. Wayne Jour.-Gaz.*

The Prophylaxis of Venereal Diseases.

The last issue of the *Journal of the American Medical Association* contains four papers bearing upon the prevention of contagion in relation to venereal diseases. These papers are contributed by Morrow, Kelley, Bulkley and H. E. Tuley, of Louisville.

Morrow and Kelley both think the effort to control this class of cases should be along the line of individual work with the young. The former especially advocates teaching sexual hygiene and the dangers of venereal disease to the advanced high school scholars, especially the boys.

It is pointed out that attempts at control fail because they are confined to the female side of the proposition. To be successful, it would be necessary to control the male element as well, and prohibit, effectually, clandestine prostitution, a thing which is manifestly impossible.

The campaign of education may be carried on constantly and the more it is agitated the more active workers it will enlist and the more good will be done.

Perhaps this is the best that can be done to protect the young of both sexes. It is little enough, however, and it seems especially futile to one who comes in contact with the disease in the person of one who is either viciously refractory to instruction from anyone,

or who has not enough gray matter to appreciate the effort being made in his behalf.

This raises the question of how can all the young be brought under the influence of the proper teaching. Certainly not by lectures to high-school classes. That would reach only a very small percentage.

The general inculcation of the teaching that the function of generation is not a shameful subject and that it is a topic about which every one above the age of puberty should be thoroughly acquainted, will do much to limit the spread of contagion.

When one considers the difficulties to be overcome, however, one must acknowledge the fact that prostitution will probably be always present in every community.

B. VAN S.

Fatigue Antitoxine.

A German investigator, Weichardt by name, claims to have obtained a stable fatigue antitoxin from horses by injecting them with fatigue toxin secured from the muscles of animals that have been subjected to extreme muscular exhaustion. When taken by the mouth in moderate doses this antitoxin is said to permit the output of increased muscular energy without fatigue. He recommends the preparation in cases of neurasthenia, convalescence, etc.

M. F. P.

Lectures for the Laity.

The Chicago Medical Society has undertaken a course of lectures for the laity on popular medical subjects. The first lecture was given by Dr. W. E. Quine on "How to Prevent Consumption," and the second by Dr. James M. Brown, on "Minor Accidents, Frost Bites and Burns." This movement deserves to be copied by all county medical societies. The dissemination of proper knowledge along these lines will be productive of much good. Many people are driven to quacks and quack nostrums through knowledge (?) gained from various sources. Fear of "taking cold" has been the inciting cause of much needless sickness and even death. Much of the opposition to vaccination is due purely to ignorance. Ignorance on the part of the laity of what may and may not be done in the way of curing disease by the giving of medicine is a source of much dishonesty or trickery on the part of doctors. The placebo was born of this ignorance. Opposition to wise laws governing the practice of medicine, the control of contagious diseases and the management of hospitals and asylums are a few of the things detrimental to the

public welfare which education may be reasonably expected to remove. More energy exerted by the profession in the direction of educating the public and less in the direction of legislation which the public does not understand the necessity for, and which, therefore, when secured, is a dead letter, is what is needed. Hence the need of courses of popular lectures on medical topics. M. F. P.

The Christian Hospital.

This Chicago fraud, with which our readers were made acquainted some months ago, it will be remembered was sued for using the name of Dr. J. B. Murphy without his knowledge or consent. Judge Holdom, before whom the case was tried, gave, in rendering his verdict, some very healthful advice to prospective promoters of similar frauds. He bases his conclusion on the law "on the broad humanitarian ground that the sick and afflicted will be protected from being deceived and misled, and perchance lured to their death by the false representations that at the Christian Hospital they will find, not Dr. Wood, but Dr. Murphy and other men of his caliber to minister to their diseased and afflicted bodies. Such charlatans as Dr. Wood and such conglomerate affiliation of quackery and baser schools of medicine to be found in practice at the Christian Hospital will not only be condemned, but restrained by law from pirating on the public when fraud and deceit are the alluring—and the court is asked to do so. I will fine the Christian Hospital \$250.00 and I will fine Dr. Wood \$100.00, and sentence him to 10 days imprisonment in the county jail and it is so ordered. The public owes Dr. Murphy a debt of gratitude for having brought Dr. Wood and the Christian Hospital before the court. M. F. P.

An Osteopath on the State Board.

The Indiana State Legislature has just passed an amendment to the medical law which provides for the appointment of an Osteopath as an additional member of the Board of Medical Registration and Examination. The Osteopaths were defeated in their efforts to secure an independent board to pass upon the qualifications of osteopaths who desire to practice in Indiana.

ORIGINAL ARTICLES

No paper published or to be published elsewhere as original
will be accepted in this department.

*Arthritis Deformans.**

BY

DR. L. P. DRAYER,
Fort Wayne, Ind.

To Dr. Walsh, of New York, belongs the credit of raising the question: "Is this or is it not chronic rheumatism?"—"If not, is there any such disease as chronic rheumatism?" At first thought, to the general practitioner, this seems an absurd question, but, as the matter is sifted thoroughly and is investigated more and more perfectly do we find that in truth chronic rheumatism is the rarest of rare diseases. Now comes the army of enthusiasts to decide the uric acid theory of many joint affections, giving to that chemical body very little if any credit for the production of pathological conditions, claiming small results obtainable in the uric acid solvent method of treatment of such conditions. Therefore, chaos has become more chaotic and yet the critical study of these conditions for the past two years has enabled us to learn more of joint affections and to more scientifically classify them.

Arthritis deformans is perhaps the disease most often mistaken for rheumatism; both are possibly microbic in origin but each running a decidedly different clinical course and each responding only to specific medication. The one, namely, rheumatism, runs an acute course with high temperature, with marked pain, polyarticular, running a fairly definite course and ending in complete recovery or in permanent joint affections in accordance with the method of treatment employed. The other beginning rather insidiously, running a slow course, with low temperature, with many joints affected, leaving permanent lesions in the vast majority of cases which become more and more deforming in character as time passes. Two decidedly different clinical pictures, and two pictures which should be oftener recognized and differentiated.

Nothing is known of the specific microbe causing the disease. Three pathological conditions are noted; namely, the hypertrophic form, the atrophic form, and that form noted in children which partakes of the nature of the hypertrophic form and which is commonly

*Read before the Fort Wayne Medical Society, Jan. 3, 1905.

known as Still's disease. The pathology is more or less indefinite in that the lesions are simulated by other well known pathological states. I especially refer to the typical Charcot joint and the joint lesion of a tuberculous in an advanced stage.

The typical deformans joint is one in which the synovial membrane is congested, velvety on its surface, contains a considerable quantity of fluid, with the cartilages of the joint breaking down; with, in the atrophic form, no enlargement of the epiphiseal bone, showing no signs of active bone formation, but with a deposit of lime salt and an eburnation most marked, while in the hypertrophic form a tendency to rarification is noted with the bone structure dense and hard and fringes undergoing calcification. These forms are not to be differentiated clinically, except by x-ray examination. (Presented radiographs illustrating this point).

In a spinal case wherein the articulation involves two or more of the vertebræ we also have the destruction of the cartilages as the first pathological evidence of the disease. It might be said here that in a few of the cases which are commonly diagnosed as sciatic rheumatism they are really cases of arthritis deformans involving the spine and with the pain marked along the course of the sciatic nerve.

Still's disease, which is an arthritis deformans in children, runs probably a more acute form and is also polyarticular in character.

While considering the pathology of the disease it might be well to speak more definitely with reference to the etiologic factor in the disease. It may be a specific infection, but this at present is conjecture. It is not, perhaps, strictly speaking, toxic in character. Acute exacerbation may become more acute, accompanied by a toxemia, but the clinical course of the disease is incompatible with the theory of toxemia as a causative factor. Both sexes alike are affected and middle life seems to claim the largest part of the victims. Race plays no part and previous illnesses exert no influence. Therefore, we are obliged to conclude at present at least, that the disease is only dependent upon trophoneurotic changes for two reasons; first, that identical joint changes may be observed in two diseases universally accepted to be due to changes in the nerve structure dependent upon a disturbance in nutrition, namely, syringomyelia and locomotor ataxia; second, the first disturbance in the joint is a nutritional disturbance which results in the breaking down of the cartilages and cessation of normal bone formation, with calcification of the fringes and eburnation of remaining bone structure.

A typical case of arthritis deformans presents a symptomatology something like this. The usual history of exposure with a stiffness of the joints, very soon followed by more or less pain, with the temporomaxillary joint most often involved, and the phalangeal joints of both hands and feet, with the larger joints more or less free until late in the progress of the disease. The temperature is apt to be low and more or less irregular in the early stage of the disease. The patient emaciates with moderate rapidity, has a moderate degree of anorexia, is constipated and moderately anæmic. Swelling is usually present in the joints involved, but need not be marked. The diagnosis is wrongly made often times and rheumatism is the name given to the disease. Salicylates are given and much to our surprise no relief is obtained. Hence the value of a good therapeutic test in making a correct diagnosis. As the case progresses the joints involved become stiff, swelling sometimes, the temperature drops and the patient shows improvement; not permanent, however, because acute exacerbations are the rule rather than the exception. With each exacerbation the joints affected become more and more involved until permanent deformities with ankylosis have developed.

In considering the early diagnosis little need be said other than that a sharp attention to the minutest symptoms brings a correct diagnosis. Any one can make a diagnosis of arthritis deformans after the disease has gone to the deforming stage.

The prognosis may be said to be unfavorable, however. Cases taken early, properly diagnosed early, and properly treated, give a fair percentage of recoveries. The treatment consists in: First, rest; not absolute rest as would be obtained by the use of a plaster cast or fixation splints, but rest to the entire body in bed, with moderately firm bandages applied to the joints affected when practicable. The clothing should be comfortably warm, woolen being preferred, and with the body evenly protected. Since careful clinical observation points to a tropho-neurotic change, it is plainly evident that the diet plays no small part in the treatment of this disease. First, get the digestive organs at work, keep every gland functioning to the fullest extent. Then allow all forms of nourishing food, meats, with pork excepted, cereals, milk, butter, eggs, and water, almost to the degree of forced feeding. Massage is of decided benefit, but the most reprehensible treatment to be employed is that which resorts to movement of these inflamed joints, the only excuse being to prevent resultant stiffness. The writer is convinced that any movement of the joint only adds to the difficulty and that any move-

ment of an injured joint must spread the inflammation, and with the conviction born of experience, it can be said that general massage alone is of service in the treatment of this disease. The hot air bath is of most decided benefit. This can be given as a body bath or the joint can be baked for twenty minutes with a temperature of 400 degrees in the smaller forms of the apparatus. No single measure is so productive of good as this. Electricity has, in my hands, given very little satisfaction. The best good is to be obtained, perhaps, from the static sparks given with a wooden electrode and passed over the affected joint. The high frequency coil which theoretically must stimulate nutrition to a considerable degree, has utterly failed to give any benefit. Galvanism applied to the spine improves general nutrition but is of minor value. Of all drugs, syrup of iodide of iron in full doses furnishes the best results. The second in importance is arsenic, and third, some form of fat from the emulsion of mixed fats to cod liver oil.

To summarize:—First, arthritis deformans and rheumatism are not even closely allied and the etiology of the two diseases is decidedly different. Second, the joint changes in arthritis deformans are perhaps due to tropho-neurotic disturbances. Third, arthritis deformans has a distinct and definite symptomatology quite dissimilar to any other disease. Fourth, treatment is of avail and that a fairly large number of recoveries may be expected from prompt and active medical interference.

Treatment of Arthritis Deformans.*

BY

DR. A. P. BUCHMAN,
Fort Wayne, Ind.

It can be taken as an indisputable fact that up to this time our data relative to the factor, or factors, engaged in the causation of arthritis deformans are incomplete.

Much that has been written on the subject is speculative and is none too substantial. Much of it is unverified hypothesis hung on uncertain logic. It follows, therefore, that we can not formulate an orthodox course of treatment that will recommend itself as "ready made" and easily applicable in any and all variations of the disease.

The first item to be considered in any given case of arthritis deformans is the personality of the patient. The second item of im-

*Read before the Fort Wayne Medical Society, Jan. 3, 1905.

portance is the patient's environments, and the third is the kind and amount of destruction already brought about.

In the first item we have to contend with the patient's previous information concerning the disease. Almost unanimously they come to one asserting that they have chronic rheumatism, they are sure of it because they have been told so by at least a half dozen good doctors. Upon inquiry one is informed further that they have taken all kinds of rheumatic cures, drugs of every kind, electricity in multitudinous forms and doses, and when you finally tell them that they do not have rheumatism at all it is both amusing and pitiful to see the stare of incredulity that meets you. A number of cases have fallen under my observation in the past two or three years, and but one came with a correct diagnosis; all the others came with what they supposed to be chronic rheumatism. The difficulty with a false diagnosis in these cases is that they feel that something radical should be done for them in a very short space of time. The greatest damage to these patients has followed the long continued use of the salicylates; digestion has been so thoroughly disarranged as to make reparation almost out of the question.

In the second item we have the patients who are unfortunate in not having time or means to devote to a systematic course of treatment. In the third item we find those who have already passed the point of all possible redemption.

Now, it is essential that we draw a sharp line of differentiation between what shall constitute a cure and that of restoration, and if this is kept clearly in mind it will save a world of annoyance. When we have succeeded in arresting further progress of the disease, relieved the patient of pain and suffering, it is competent to say that the patient has been cured. On the other hand, to restore the affected joints to a reasonable degree of usefulness is a work of an entirely different nature. The cure is not a task that should deter any one from undertaking it. Once having the diagnosis clearly in mind, the patient made to fully comprehend the possibilities if complete and conscientious obedience is given and all possible things that aggravate the condition religiously avoided, one can, with reasonable certainty, promise enough to satisfy all demands and to be in position to redeem the promise.

When you undertake the task of restoration you have altogether another problem to solve. In cases in which considerable advancement and consequent destruction has occurred the patient must be made to fully understand that time and dogged perseverance is

an essential if they are to avoid the direct consequences of the disease. Once get the condition under control and the further advancement of the disease arrested, it follows that the real work before one is just begun. The joint fixture and the attendant muscle atrophy must both be brought under strict supervision at the same time. In many of the cases the joints will respond, in part, very early in the treatment; it is just now that muscle exercises will have to be prescribed that have for their aim the normal anatomic motion and physiologic function of the muscle involved. This is essential, as it starts the force to moving in the direction of the least resistance, and at the same time encourages better nutrition. If now the physician can maintain his enthusiasm and the patient faith and hope you can confidently look for an amelioration that will be in full compensation for all labor and time expended. It is essentially necessary that the patient be fully impressed with the necessity of continuity of effort.

In the report of a series of cases, one hundred and ten, I think, observed in the John Hopkins Hospital, Osler's clinic, the general plan of treatment outlined was as follows: (1). Locally, i. e., for the affected joints, the great object to be attained is rest. For this some kind of jacket is suitable. With the parts at rest the pain and muscular irritability lessens. (2). Fresh air and sunlight, nutritious diet. (3). Iron, arsenic, cod liver oil, etc., by way of drugs. (4). Massage, bathing and hot air and baking to a limited extent.

Dr. Clarence Edward Skinner, in an article printed in the *Jour. A. M. A.*, October 8, 1904, title "The Treatment of Arthritis Deformans" says: "Malnutrition is an almost constant characteristic of this disease" and advises in the beginning a generous diet composed of nutritious foods. Woolen underwear, light in the summer, very heavy in the winter. Rest. Patient should be instructed to not use the affected joints to such a degree as to produce pain. The drug treatment of arthritis deformans is unsatisfactory so far as obtaining curative results is concerned. Only a few elements of the materia medica have succeeded in gaining a lasting reputation in this connection and all of those that have, except the salicylates are of the tonic and alterative classes, hence exert their beneficial influence through their power to improve the general metabolic functions. Dry hot air and electricity, mechanical vibratory stimulation and massage. We are here at the end of the chapter of the

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al orthodox methods of treatment, with the usual doubt and uncertainty confronting us.

Personally I have had some experience with a sufficient number pronounced and typical cases of arthritis deformans within the last two and one-half years to have formulated, in my own mind at least, a somewhat more optimistic view of the future of these cases. Case A. Came to me with the following condition which was the product of some five years duration. The elbow, wrist, hip, ankle and toe joints firmly ankylosed and accompanied with the usual deformities. The muscular attachments to these joints were wholly out of use for so long a time as to eventuate in the almost complete atrophy of all the muscles accompanying the joint movements. The vertebræ in both lumbar and dorsal regions were rapidly becoming fixed.

This patient was at once put on a restricted dietary; that is, the foods were selected for their value in phosphoric and nitrogen contents, the amylaceous articles were restricted in amount, and at first one meal daily was allowed. At this meal the patient was permitted to satisfy the hunger sensation, or, in other words, the body craved food.

The drugs consisted in thoroughly saturating the system with thyroid extract. The purpose in mind was to encourage oxidation according to the theory I hold is that, primarily, arthritis deformans is a nutritional disease depending upon a sub-oxidation of the purin bases. The daily subjection to photo and hot air therapy was followed out with strict attention to details; in addition, high-frequency currents were administered at the same time that the patient was receiving the hot air bath and light. Mechanical vibratory stimulation was given daily. To this was added, very cautiously at first, just enough hand massage as was consistent without causing pain. Then gradually, as the pain diminished, the massage was increased. At this time I began a system of muscular exercises having for their object the use of the atrophied muscles. This was kept up daily and systematically with the result that in time the muscles began to fill out and assume normal action. The general principle followed out in the treatment was based upon the idea that all and everything that was being done for the patient was therapeutic and the most careful care was taken that nothing should be done that would be experimental. By this I mean that no joint movements were permitted until the patient was ready for them, until pain had been kept under sufficient control so that the movements were grateful

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rather than painful. Digestion was constantly under supervision and the least departure from the normal was immediately corrected. The drugs were not pushed to any degree, in fact there was much of the time that no drug was taken.

To conclude, I am happy to say that from a helpless invalid a condition of complete self help, in fact a restoration so full and complete as to make her adequate to a majority of her own household duties with comfort and ease, a lessening of the joint deformities to the extent of a cosmetic effect where she is not annoyed by having the hands in view when in company.

Case (B). This case had all the specific characteristics of case (A), and in addition is a frail, and by heredity, a physically sensitive person. She has had sick headaches from the time of earliest recollection. The course of dietary regulations had to be greatly modified in comparison with case (A). Otherwise the treatment was carried out along similar lines with very gratifying results.

I have been able to come to the following conclusions as a result of my observation of the two above given cases and of several others that have come under my care.

- (1). That arthritis deformans in its early stages is curable.
- (2). That when the disease has advanced to the point that nodules and joint deformities are present the condition is amenable to restoration provided the destruction has not advanced too far.
- (3). That there is no one well defined line of treatment that can adapt itself to any number of cases.
- (4). That there is absolutely no drug treatment applicable to arthritis deformans except as it may be made to increase the nutritive powers, and in some sense add tone to the system generally.

Diseases Frequently Mistaken for Acute Inflammatory Rheumatism.*

BY

DR. B. VAN SWERINGEN,
Fort Wayne, Ind.

Acute inflammatory rheumatism is a disease with such a marked individuality that it would seem as though the veriest tyro in the healing art should be able to recognize it perfectly on all occasions.

It has been alluded to as a perfect example of an acute infectious disease.

There could hardly be much doubt about a case which was preceded by a sore throat, was ushered in by chilliness and rapid rise of temperature to between 102 and 104 degrees, and pulse at

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100, followed by furred tongue, profuse acid sweats, sudaminal vesicles or other frequent skin symptoms, painful, hot, red, and swollen joints, a rapidly developing anaemia and a well marked leucocytosis, especially if endocarditis or valvulitis early made its appearance. But it happens that all cases of rheumatic fever are not so well marked, and that when this is the case it approaches in appearance one of a number of other diseases.

There is one peculiarity of the joint involvement in rheumatic fever which is possessed by no other disease, and that is its migratory propensities. As a new joint shows signs of inflammation some one of those already affected begins (very frequently) to get well.

There is another thing which characterizes the rheumatic trouble to the exclusion of other similar diseases, and that is its favorable response to or cure by the salicyl preparations, properly administered. Roger says, pp. 804, *Infectious Diseases*, in treating of antipyretic remedies: "Salicylate of soda lowers the temperature in cases of rheumatic polyarthrititis, but it is the specific of the affection. On the other hand, it is without effect in infectious pseudorheumatism. It may, therefore, serve the purpose of differential diagnosis."

Acute articular rheumatism most frequently attacks the young adult but we have all seen it in children from infancy up to adolescence. When such an affection occurs in a child and is uninfluenced by the salicylates, it is well to suspect Still's disease, which is an acute form of arthritis deformans found in children, in which are present enlarged lymph glands and swollen spleen. The fact that the joint affection is not so migratory may help to distinguish it. Then, too, Still's disease frequently occurs in girls and before the second dentition.

The acute form of arthritis deformans in the adult is often mistaken. Its onset is not so abrupt, the swellings are more pyriform and symmetrical in distribution, more rebellious to treatment and there is not so much danger of cardiac involvement.

Influenza may produce the inflammation of many joints, with severe pain, almost undistinguishable from rheumatism, but suddenly ceasing with a rapid fall in temperature and unattended by any other rheumatic signs.—Sansom, *International Clinics*, 1895, April. So, too, may acute inflammation of the spinal cord and its coverings.

The manifestation of gout which resembles rheumatic fever is the acute attack in which a joint, usually one of the smaller joints, as the metatarso-phalangeal, after a day or two of slight occasional pain, begins to pain in earnest. The attack usually comes on during

the night. The joint becomes red and swollen and the skin shiny and tense. Then although the pain lessens during the day the swelling does not disappear and the pain recurs again the next night, the entire attack lasting from 5 to 10 days. There is more or less fever during the "fit." Early in the attack the diagnosis may be in doubt. As the case progresses one should be able to make up his mind, especially if it be not the first attack.

Where more than one joint is involved the problem is rendered more difficult. Osler says that the involvement of several joints in gout is not so frequent. In this case the diagnosis might have to rest on the presence of tophaceous deposits or on a careful study of the output of uric and phosphoric acids, which are notoriously low save during the acute manifestation.

It must not be forgotten either that there is a joint involvement which is secondary to other diseases, and when one is called to a patient whose sole complaint is a swollen, red, painful knee, one must not take it for granted that it is acute articular rheumatism. A few questions regarding previous health may elicit important information, and again it may not, for some people pay little attention to their ailments until actually disabled. Inability to elicit a history of scarlatina should not, for instance, absolutely remove that from among the possibilities, because many cases of scarlatina are so mild as to escape detection by mother, nurse and patient, and yet are followed by joint inflammation.

Gonorrhœal arthritis usually begins while the urethral discharge is still present; but in the female there may have been no unusual discharge or other symptoms to denote infection by the diplococcus of Neisser.

The acute gonorrhœal arthritis which is limited to one joint and does not migrate would not for many days be confounded, but the polyarthritic variety more closely resembles rheumatic fever. I recall one case in which not only the many small joints of hands and feet were involved, but the articulations of the spinal column as well as some of the larger joints. Pure cultures of the gonococcus may be grown from the joint fluid. The involvement of the sterno-clavicular articulation, the temporo-maxillary, sacro-iliac and intra-vertebral should arouse suspicion, because these are not usually affected in acute articular rheumatism.

Dysentary is also followed occasionally by acute inflammation of joints, as is also septic processes in general.

One must remember also that tuberculosis may present features

resembling acute rheumatism, although rarely. W. G. Stern, *N. Y. Med. Jour.*, July, 1902, devotes particular attention to tuberculosis arthritis and holds that a safe rule is that arthritis of one joint in a child lasting more than 15 days and not influenced by salicylates, is either acute tuberculosis or osteo-myelites. Poncet and Roger both report such cases. The latter says his patients' "affected joints were swollen, the skin white and slightly oedematous, and movement almost impossible." The patient had emaciated and had pallor and dyspnœa. The pleural cavity contained serum. The joint symptoms disappeared in a week but the pulmonary involvement progressed to a fatal issue in four months.

Acute Osteo-myelitis I have myself mistaken for the joint involvement of acute articular rheumatism. One is led into this error when the disease involves the lower end of the femur or upper end of the tibia. But usually the symptoms are more severe and the pain is not located in the joint nor is the redness and swelling so purely there as in the rheumatic arthritis, especially at the beginning.

Clinical Results of High-Frequency Currents.*

BY
DR. A. W. CRANE,
Kalamazoo, Mich.

The public has always had a large vague faith in the power of electricity to cure disease. Quacks have found in this faith a means to work wonders, but earnest physicians have had mostly failures to report in the use of faradic, galvanic or static electricity in the treatment of definite diseases. So that up to the time of the discovery of the x-ray, electricity did not enjoy the general confidence of the medical profession.

Following the discovery of the x-ray there came an electro-therapeutic renaissance. In addition to innumerable forms of static machinery many large induction coils came into use for x-ray purposes. The discharge from a coil was altogether too powerful to be applied to the body. But the users of coils in America did not seem at all anxious to modify this discharge for the general purposes of electro-therapeutics. In Europe, however, there was developed, immediately after Roentgen's discovery, a great interest in the adaptation of these coils to electrical treatment. Curiously enough it was in America, years before the x-ray was known, that the method was discovered of so transforming the discharge from

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a large coil that it could be applied to the human body. The therapeutic possibilities, however, lay dormant until two Frenchmen, D'Arsonval and Oudin, brought them to the light of day.

My personal interest in the subject was aroused from time to time by reports from Continental sources of the marvelous physical and physiological properties of the high-frequency currents. In a general way I understood that this apparatus was composed of two coils of wire, two condensers, and a spark gap; but I could not find in any literature accessible to me, a precise description of its structure. So I wound a number of bobbins with various sizes and lengths of wire, and made various sized condensers to determine the relations best productive of high frequency currents. The result was an apparatus which follows closely the regular Oudin type of resonator.

The materials for such a resonator are cheap and all obtainable in any town. There is nothing in its construction which would prevent any physician of average ingenuity from putting it together himself at the small cost of six or seven dollars. In this connection it is amusing to read the advertisements in our journals of practically the same apparatus, only smaller and less efficient, for the sum of sixty-five dollars. This is, however, in accord with the preposterously excessive prices asked for electrical appliances of all sorts.

The specifications for a full sized resonator for a twelve-inch coil are as follows: Bobbin, of wood, thirty inches long and having a diameter of ten inches. Two sizes of copper wire are used, the larger size being known as No. 8, the smaller size as No. 16. The larger size wire (No. 8) is wound around the bobbin twenty-four times, with four turns to one inch of the length of the bobbin. The smaller size wire (No. 16) is wound around the bobbin one hundred and ninety-two times, with eight turns to the inch. The windings of the larger wire are separated from one another by windings of cord one-eighth of an inch in diameter. The smaller wire is wound on ribbed rubber matting such as is commonly used on stairs and in hallways, the wire being wound in the grooves of the matting which are just right for the purpose. The condensers are made by pasting tin foil on window glass. There should be from one hundred to two hundred square inches on each surface, with margins of two inches.

The full size resonator—thirty inches long and ten inches in diameter—when completed gave me a very abundant effluvia of

soft sparks eight or nine inches long, which felt on the hand like the touch of a feather duster. If the hand were close enough, however, a vivid, crashing spark of six or seven inches would jump from the machine. But if a piece of metal be held between the fingers to receive the impact of the spark, nothing can be felt. The discharge is given off from a single terminal. There are no positive or negative poles in the same sense as with the galvanic, faradic and static machines. And if this single terminal be seized, the entire discharge of our resonator can be taken without the slightest sensation or muscular contraction of any sort.

If two men hold an ordinary electric light bulb between them, and then make contact with the extremities of our primary solenoid, enough current flows through them to illuminate the bulb; but the men feel nothing. This classic experiment of Tesla's can never fail to excite our wonder if we recall the fact that a high-frequency current is a current of several million volts.

An ordinary vacuum electrode not connected in any way to the machine, glows with a soft light ten or twelve feet away. Likewise, a low-vacuum x-ray tube held in the hand of a person not connected with the machine and without any connections of its own will light up as though yielding x-rays. If the x-ray tube be hung from the single pole of the resonator by its cathode terminal, it lights up brilliantly and yields strong and abundant x-rays.

The clear cut hemispheres of the tube show that the current which is actuating the tube is not an oscillating one as is universally stated. I make the statement on my own observation that the pulses are unidirectional. This remains true even though the Caldwell interrupter is used, which on the alternating current gives an alternating discharge from the coil. However, if the finger be advanced toward the free anode of the tube, we see springing from the finger electrical streamers as if the other half of the current were being drawn from the body itself. And when the finger finally touches the anode terminal of the tube, the action of the tube shows unmistakably that we do now have an oscillatory discharge.

When a patient is seated beneath an x-ray tube which is connected by its cathode terminal to the pole of the resonator, and when the bare hands or feet are connected by a wire to a metallic point which is fixed just out of sparking distance, at a node near the top of the resonator, then we find that a strong static breeze, a high frequency effluvia and x-rays are all streaming from the tube. It is as if the vacuum tube were acting as an electric prism, separating

the electric current into its component parts, from the palpably coarse waves of the static breeze through the high frequency waves to the impalpably fine waves of the x-rays; and no one knows what intermediate waves; just as light is separated into the coarse red waves and on through the spectrum to the violet and the ultra-violet.

The current from an Oudin resonator is, as the name implies, a current of resonance. If a tuning fork is made to vibrate near a piano, a chord of the same note in the piano box begins to vibrate in sympathy. Likewise we find that if we tune the primary solenoid of our resonator to the right number of electric oscillations, we get sympathetic electrical pulsations in the secondary resonator alone. The tuning is accomplished by means of the spoke-like handles which turn the bobbin. These sympathetic pulsations constitute our current of resonance. It is a current of several million volts, yet it cannot be felt. The frequency of pulsation of the current has become so high that both nerve and muscle have ceased to respond. Vibrations which constitute light act in the same way. The nerves of the retina are sensitive to the spectrum from red to violet, but when the rate of vibrations of either exceed that of violet, the retina ceases to respond, and no light is perceived. Yet we know that vibrations more rapid than violet do exist, and we call them the ultra-violet rays. The parallel may be followed another step: The therapeutic activity of light is vastly increased when we reach the ultra-violet frequency of vibrations. Likewise, the therapeutic activities of electricity are vastly increased when we reach a sufficiently high frequency of oscillations. A more careful consideration of the physical properties of currents of high frequency would make the physiologic effects seem less incredible.

The following clinical results were all obtained with the home-made apparatus before mentioned. The cases cited were treated in the course of daily general practice, and illustrate above all the practicability of this piece of apparatus in the hands of the general practitioner.

Case 1: One of my first cases was that of a business man whose office is in the same block as my own. He had arisen from bed that morning with a very stiff back, but managed to get down town. During the morning, however, the trouble increased very rapidly so that he could not assume any position that was not acutely painful. When he was helped into my office the diagnosis of acute lumbago was clear. I applied the high-frequency current through

the medium of a vacuum tube for fifteen minutes to the bare skin of the back. At the conclusion of the treatment the patient asserted emphatically that he was entirely well. He had no pain whatever. He could take any position he wished. He refused to go home, and took no medicine. He returned at once to work, and there was no recurrence after that single treatment. I have verified these results with many acute lumbagos since, except that often the symptoms return after thirty-six hours, and the patient will come in for several more treatments.

Case 2: A somewhat similar case was that of a young man who came in with his head drawn stiffly to one side by an acute torticollis. The effect of the treatment was immediate and the patient left the office wholly relieved. There was no recurrence and no second application.

Case 3: Another case was that of a chronic rheumatism of the knee which had caused the patient to limp for a year, and had entailed much suffering. It will illustrate the extraordinary anæsthetic powers of the current. The first treatment of fifteen minutes wholly relieved the pain, and the patient walked off without a limp. But after about thirty-six hours all symptoms returned. Applications were repeated every other day until finally after fifteen treatments the knee remained well.

Case 4: Gout is a fine subject for high-frequency treatment. Pain is at once relieved, and the swelling and redness disappear after a few treatments.

Case 5: The high-frequency current is of marked service in many rectal disorders. In one case, a chronic fissure in ano with ulceration healed with surprising rapidity. Pruritis ani is largely controllable by this means. Hemorrhoids which can be replaced seem to be curable.

Case 4: The most remarkable case I have to report is that of a woman of 66 who for four days previous to her visit at the office had been in constant pain in the rectum and throughout the pelvis. For months preceding she had had more or less pain daily, especially on defecation. Her passages were like thin ribbons. Her pain now never left her day nor night. On digital examination the rectum at the height of the second sphincter was filled with a nodular growth by which the lumen was almost obliterated. The tip of the finger could barely distinguish the opening. Examination through a Martin's rectal speculum showed the rectum blocked and the lumen reduced to a small slit. There was no ulceration and no discharge.

The age of the patient, her anæmia, and her history of several months of gradually increasing trouble caused me to make at once, in my own mind, a diagnosis of cancer of the rectum. I said nothing to her, intending to communicate with her daughter. She begged for some relief and sleep, and morphine seemed inevitable. But first, I thought, I will put the anæsthetic power of the high-frequency to a supreme test. So with her permission I passed a cylindrical vacuum tube as far into the rectum as possible against the growth. She received the full discharge for 20 minutes. She then sat up and told me in sober earnestness that all her pain was gone, and that all the distress and weight in the lower part of the abdomen had completely vanished. Excepting a restricted diet and oil enemas, she had no other form of treatment. The next day there was a slight return of symptoms and she received another treatment. In the meantime I told her daughter my opinion of the case and advised a consultation with another surgeon, and the submission to an operative procedure if found advisable. Her son in Chicago consulted Dr. Bevan, and came on to Kalamazoo with the intention of taking her to Chicago for treatment. The patient, however, refused to go to Chicago, and insisted on a continuation of the treatments. I advised against delay, but pending her decision continued treatments every other day. The patient began to make a decided gain in general health, and the pains never returned. Defecation became easier and finally normal, and by the time she had taken thirty treatments, no obstruction in the rectum and no growth could be detected. She then consulted Dr. Bevan, who pronounced her free from rectal troubles. I stated to the family that I had been in error in my diagnosis of cancer. But, whatever it was, the result of the high-frequency application transcended anything in my experience.

Case 7: In a case of cystitis in a lady of 50, the patient had suffered the usual tortures of that malady for about four months when her case came under my care. Her nights were especially miserable from incessant and painful urination. The alkaline urine contained 50% of pus, a trace of albumin, but no casts that we could find. Under urotropin a decided improvement was made, but complete relief was a long way off. Hemorrhoids and rectal pains on defecation were also present, and I had her come to my office for high-frequency rectal treatments. After a couple of applications she informed me that her bladder trouble was helped by the rectal treatments. In order to ascertain whether or not the vesical im-

provement was due directly to the current or indirectly to the improved rectal conditions, I passed a slender vacuum tube into the bladder itself and run the resonator 15 minutes. The next day I received a telephone message from one of the most grateful patients I ever had. "For the first time in months," she said, "I slept nearly all night and could urinate without pain." The trouble began to return within thirty-six hours, but about twenty more treatments were given which, with the urotropin, brought the case to a favorable termination.

Case 8: A case that I had operated upon for dysmenorrhea by dilatation and curettage returned after four months of relief and announced that her old pains had returned to some extent. In spite of verbal encouragement and liquor sedans the trouble rapidly grew worse with each monthly period. The pains would begin shortly before the flow started and continue for three days. She refused to have the operation repeated. One evening the mother telephoned me that her daughter had begun her monthly suffering and asked me to come up and give her something to relieve pain. I asked her to bring her daughter down in a closed carriage and I would see if a new form of treatment would be of any avail. A vacuum tube was inserted so as to lie against the uterus and 15 minutes of the full current given. After 10 minutes the patient declared that her pain had vanished. After the treatment she felt perfectly well, the weight and dragging in the pelvic viscera having disappeared. The pains did not return during that period. With great expectations of a permanent cure I gave her repeated treatments preceeding the next period. But the pains began just as before. A single treatment, however, after the onset of the pains, gave complete relief. Further observation fully convinced me that the pains could not be prevented by any treatment given before the onset of the periodic pains. I have had no opportunity of verifying these results in any other case.

Case 9. One case of painful scar on the hand of a fireman is interesting. The pain radiated up the arm and for over a year had been intermittently of great annoyance. I told the patient that an excision of the scar would probably be necessary because of included nerve ends. But first, I said, let me experiment with electricity on that thing. The first treatment of course relieved the pain. I had my assistant give daily treatments to the scar, which became very red. Under a lens fine blood capillaries could be seen ramifying the old scar tissue. After a week's treatment

we stopped to permit the inflammation to subside. In a week redness disappeared and the scar which had been so prominent, was largely absorbed. This was doubtless due in large part to mechanical irritation of the spark and the extraordinary increase of blood supply. The case has remained free of all symptoms.

It is easy to remove warts, moles and corns with the high-frequency spark. One application is usually sufficient for small areas. It is of great efficiency in the cure of x-ray excrescences on the hands of operators, as I can testify in my own case. And possibly it may be of service in increasing the vitality of tissue in x-ray burns.

These cases are few and insufficient, but the time limit prevents a fuller consideration of this subject. I have reported successful cases only because they alone can show the power and range of these high-frequency currents.

Such an efficient and practical therapeutic agent as this should be more fully appropriated by the regular profession.



SOCIETY PROCEEDINGS

Fort Wayne Medical Society.

Meeting of December 20, 1904, at the Fort Wayne Club.

Society called to order by President Morgan with forty-four members and guests present. Minutes of the previous meeting read and approved.

CLINICAL CASES: Case I. *Cicatricial Stricture of the Esophagus from Swallowing Lye* was an interesting case presented by Dr. M. F. Porter. The patient, a child two and one-half years of age, died from acute parotiditis twenty-six hours after the last dilatation, and eleven and one-half weeks after the accident. The post-mortem findings showed the infection a mixed one, with the bacillus proteus predominating. The doctor said that notwithstanding the opinion of the bacteriologists to the contrary this case seems to show that under certain circumstances the bacillus proteus may become seriously pathogenic. A No. 12 esophageal bougie was passed every second or third day for a period of two weeks, during which

time the child was swallowing quite well. At the end of this time the ability to swallow was lost, and it was found impossible to pass a bougie which previously had passed without difficulty. After some perseverance a No. 8 English cathetre with a stylet was passed through, after which seven ounces of milk were injected into the stomach. On the following day the No. 12 esophageal bougie was again passed with but little difficulty. On entering the hospital three days before death the pulse was 100 and temperature 101, and so remained until three hours after the last instrumentation, when both began a rapid ascent. Within an hour after the child was taken from the operating room after the last instrumentation the nurse noted swelling in both parotid regions. The child rested well for twelve hours but the temperature and the pulse rose rapidly. The last record was made two hours before death when the temperature was $105\frac{1}{2}$ and pulse 150. The child grew restless and experienced much difficulty in breathing, the trouble being much like that seen in great swelling of the tonsils. The swelling is best described as boggy, with no redness on the surface. Coma supervened and death occurred twenty-six hours after the last instrumentation. Post mortem examination disclosed an infiltration extending from the larynx upward on both sides, which appeared purulent and involving the esophagus. The esophagus was found thickened, with the calibre, very much contracted, and the mucous surface red for a distance of about three inches, commencing one and one-half inches below the cricoid. From the stricture upward to the pharynx the esophagus was considerably dilated but presented no perforation, laceration of mucous surface or esophageal walls unless it be at one point at the commencement of the esophagus where three spots of echymoses the size of pin heads presented an apparent abrasion. The mesenteric glands were found enlarged and nodulated. The stomach, kidneys, spleen and liver presented no abnormalities. Bacteriological examination of the smears and cultures showed the infection to be a mixed one, the bacillus proteus predominating.

Case II. *Intussusception of Meckel's Diverticulum* was also reported by Dr. Porter. The patient, a boy three years of age, had been taken sick three days before with a sudden pain in the belly followed by vomiting. Tympany did not develop until the third day, when he was brought for operation. When he arrived at the hospital his hands and extremities were cold and no pulse was discoverable at the wrist. Pupils were dilated and operation was undertaken with the knowledge that in all probability the patient

was beyond relief. The diagnosis of intussusception was verified after the belly was opened. The child died on the table just after the operation had been completed. Intussusception of Meckle's diverticulum was found. (Specimen shown.)

Commenting on the case Dr. Porter said that sudden pain in the belly of a child in the midst of health should at once arouse grave suspicion of intussusception, for nine times out of ten it means intussusception and should be operated. Early diagnosis and prompt operation will rob this accident of most of its fatality.

Case 111. *True Myoma of the Uterus* reported by Dr. Porter. The patient, a young married woman, had a miscarriage four weeks ago, following a pregnancy of two months, since which time she has not menstruated. She gave a history of beginning menstruation at thirteen years of age which had been regular, the flow normal, though at times she had suffered from severe cramps. An aunt and grandmother died of cancer, and an uncle living has tuberculosis. Her parents are living and in fairly good health. About two weeks before the miscarriage the patient noticed an enlargement of the abdomen with considerable tenderness. For about four months before the miscarriage she vomited frequently, this symptom always developing after lying down. The tumor on operation proved to be a true myoma of the uterus. (Gross specimen and microscopical section presented).

In discussing the cases reported, Dr. S. H. Havice said that the case of stricture of the esophagus resulting from the swallowing of lye was of particular interest because the general practitioner frequently comes in contact with similar cases. When one considers the carelessness with which caustic lye is employed in almost every household it is a wonder that lye burns are not more prevalent. The swallowing of lye nearly always produces serious results, and parents should be advised at once of the ultimate bad effects which generally follow this accident from the fact that the smallest amount of lye coming in contact with the lining membrane of the esophagus usually produces adhesive changes and stricture.

Dr. M. I. Rosenthal, speaking of the case of myoma of the uterus, said that changes in true myoma of the uterus are rare, whereas changes in other tumors are not uncommon.

Dr. H. A. Duemling, speaking of stricture of the esophagus, said that these cases should be considered serious for the reason that divulsion of any stricture is not a simple procedure, and is quite apt to be followed by serious results even when done with the utmost

care. One of the chief dangers in these cases is the possibility of infection which it is practically impossible to prevent. The effect of the sepsis will depend upon the character of the pathogenic organisms present.

Dr. G. W. McCaskey said that he did not believe that bacteriologists generally consider the bacillus proteus always non-pathogenic. In his judgment it is pathogenic under certain circumstances, and he thought he had been able to verify the statement by patients in his own practice.

Dr. C. E. Barnett said that the case of myoma of the uterus was interesting to him because the changes show how easy it is for the prostate to change from an adenoma to adeno-myoma and from this to a true myoma.

In closing the discussion of the cases reported Dr. Porter said that in the case of stricture of the esophagus the infection came from the instrumentation but is not sure from which one. Perhaps it was the first instrumentation eighteen hours prior to the first unfavorable symptom. There was no œdema of the glottis. He said that there is no cavity as dirty as the mouth, and there is certainly no cavity as dirty as a mouth when there is a stricture of the esophagus, consequently the possibility of infection is ever present.

PAPERS:—*Why Doctors Grow Fat and not Rich* was the title of a humorous though interesting paper by Dr. W. O. Gross. Among other things the speaker said that the doctor who is constantly inclined to merriment is not usually serious and therefore does not properly appreciate the necessity for careful and painstaking attention to his cases, nor does he impress his patients with the idea that such attention is given. The successful doctor is not one that is constantly chasing rainbows, as indicated in the man who is frequently changing locations in the hope of bettering his condition. The paper closed with the recommendation that every medical man consider it a religious duty to identify himself with his local and the State and National Medical Associations, and that he take advantage of every opportunity to add to his store of medical knowledge. No physician can expect to be abreast of the times and successful if he fails to buy medical books and current medical literature and read them, attend progressive medical societies, and occasionally visit the colleges in our metropolitan centers for post graduate study.

This paper received considerable discussion of a humorous nature.

The Early Diagnosis and Treatment of Gastric Cancer was the title of a paper presented by Dr. G. W. McCaskey. The doctor said

that in most cases of gastric cancer, as is true of many other chronic diseases, the initial stages are practically symptomless. It must be confessed that we are today without a single pathognomonic sign of early pyloric cancer or other gastric cancer. In general it may be said that any case of progressive and intractable stomach disease, especially if developing upon a healthy background, or even in a patient who has had a very prolonged but comparatively slight digestive disorder, should not be allowed to continue more than five or six weeks without an accurate diagnosis being made at the hands of a competent person.

When such person, after study of the case, decides that there is strong suspicion of malignant disease, then it becomes his duty to advise exploratory laparotomy. Exploratory incision is much better than to allow the case to go until beyond operative relief. There is no doubt that cancer is primarily a local disease, and that if it can be sufficiently early recognized and eradicated by free incision, a permanent cure may reasonably be expected. It is simply a case of clinical judgment when an exploratory incision is indicated, and therefore it must necessarily be that now and then a mistaken exploration will be made. Stomach analysis will as a rule give only corroborative evidence. The pain and vomiting of gastric cancer are in no sense distinctive and may be duplicated in non-malignant disease. The anemia which is so marked in some cases is purely a secondary phenomenon and the leucocyte count is not significant. The characteristic thing about nutritional disturbance in gastric cancer is its slow development. Personal observation shows that pain, vomiting, etc., precedes emaciation. Too much stress is laid on the failure in nutrition. It is true that in many cases emaciation is an early symptom, but these are exceptions to the rule. Have reported cancer case that gained 35 pounds in weight. Am unable to put finger on symptom that is certain in diagnosis. It is largely a question of individual case.

It appears to me that gastrectomy should be the operation of choice, as gastroenterostomy is admittedly only palliative in character, and does not by any means offer the same degree of palliation as a radical gastrectomy does. The question as to whether the presence of a palpable tumor makes it too late for surgical intervention is a most interesting one. It is probably true that in a vast majority of cases that when the growth has reached a stage when it can be palpated through the abdominal wall, sufficient metastasis has occurred to make a complete removal impossible.

In the discussion of the paper Dr. B. Van Sweringen said that there are two propositions to be considered in this class of cases. First, if we are ever going to cure these cases by operation we must do the operations early. Second, the patient with the gastric cancer must have an early diagnosis if he is to secure the advantage of an early removal. Usually it rests with the patient to a great extent if we are to accomplish the most for his good. Generally he does not think he is sick enough to have an operation made. Often it requires a microscopical examination to decide as to the diagnosis of the case even after we have made the exploratory laparotomy. Persons with cancer of the stomach have the least chance of getting well of any of the cancer cases.

Dr. M. I. Rosenthal said that in these cases diagnosis following exploratory operation will be facilitated if we note the character of the infiltration. Gastro-enterostomy removes the irritation of food over the area of infiltration, and thus tends to limit the growth. The mortality from operations of the stomach has decreased owing to improvement in the technique and the better knowledge of the effect of surgical procedures upon the function of the stomach. All the obscure stomach cases mentioned by Dr. McCaskey which do not improve after two or three weeks of proper treatment should be subjected to exploratory operation.

Dr. E. J. McOscar said that until we can open the belly and then determine whether to make gastrectomy we cannot say we are sure of an early diagnosis of cancer of the stomach. Surgical treatment is *the* treatment and the only one that holds out any hope.

In closing the discussion Dr. McCaskey said that every case of obstinate stomach disease must be looked upon as suspicious, and in that light he thought exploratory operation indicated in a large number of such cases.

The retiring President made a short speech in which he complimented the Society upon its marvelous growth and activity and its general usefulness to the medical profession of the community. He then introduced the new President, Dr. L. Park Drayer. Afterward the members and invited guests enjoyed a smoker program.

Adjourned.

J. C. WALLACE, Sec'y.

Meeting of January 3rd.

Called to order by President Drayer, in the Assembly Room of the Court House, with thirty members and guests present. Minutes of previous meeting read and approved.

CLINICAL CASES:—*Pyloric Carcinoma with Exhibition of Patient*, by Dr. B. Van Sweringen: Mr. H. F., aged 58; occupation, farmer and saloonkeeper; father died of spotted fever at 58; mother of dropsy at 65; sister died of consumption, following measles; patient never had much sickness; alcoholic indulgence moderate and irregular; no leutic history; had gonorrhœa five years ago; good recovery; seventeen or eighteen years ago had dyspepsia for a year; did not vomit; fats seemed to disagree; present illness began one year ago last June; sour stomach and belching; has had three attacks of pain in epigastrium; came on suddenly and left same way; lasted ten or fifteen minutes; did not radiate; vomiting occasionally five or six hours after meals; never vomited blood; vomit quite profuse in amount; has lost weight recently; former weight 160, present weight $135\frac{1}{2}$ pounds; has some enlarged inguinal glands, both groins, size of almonds; none in axilla or neck.

Examination abdomen: Outline of stomach very plain; whole organ prolapsed and enlarged; hard tumor, palpable, in pyloric region; liver prolapsed and enlarged; solenic dullness increased; urine 1026 Alb. and casts (granular) present, also blood and pus cells in sediment.

Urine findings January 4, 1905: 1026, no albumen; 30 ounces 24 hour quantity; 4% urea; hyaline and pale granular casts; few blood and pus cells.

Blood: Hemaglob. 78%; Corp., red 5,000,000 white, 13,000.

Gastric contents: No response to Gunzberg test; lactic acid present; opplar boas present in wash water before breakfast; contents of fasting stomach much increased in amount and dark "coffee ground" in appearance.

Diagnosis, pyloric carcinoma, dilitation, gastroptosis, etc.

Treatment, lavage.

Later: Gastro-enterostomy made January 8th. Belly opened and no attempt made to remove pylorus which was carcinomatous Mesentery and omentum contain nodules. No doubt of cancer; patient doing well now ninth day after operation; retains all kinds of food.

In discussing the paper Dr. M. F. Porter said that enlargement of the glands in the groin is found in a great many individuals and

indicates neither malignancy, syphilis or tuberculosis. They come into evidence as a result of the loss of adipose tissue. From the history of the case it seems that too long a time has elapsed for the radical operation. The case may be due to cicatricial contraction due to ulcer. Operation is warranted. People die as a result of closure of the pylorus.

Dr. M. I. Rosenthal said that cachexia is a late manifestation in gastric cancer. Metastasis into neighboring organs comes on rather late. If these inguinal glands are malignant a rectal examination will show enlarged glands in the pelvis. If not malignant a gastro-enterostomy will cure, and if malignant it will at least relieve.

Dr. E. J. McOscar said that occult blood is determined by chemical analysis and not by the microscope. According to Boas occult blood is always present in cancer, and if it comes and goes it is probably due to some other cause. In these cases on operation an anastomosis between the stomach and the intestine will control the vomiting.

Dr. C. E. Barnett said that he did not see how inguinal glands could be enlarged from the circulation of lymph from the stomach, nor could he understand how the inguinal glands could be enlarged from a growth involving the rectum. In operation he would not advise the use of a general anæsthetic, owing to the presence of albumen and casts in the urine. He thought a general anæsthetic in such a case would be unnecessarily dangerous. He thought the case one for gastroenterostomy under local anæsthesia, using the McGraw elastic ligature.

Case 11. *Perforating Ulcer of the Stomach*. The report of this case consisted essentially in the exhibition of mounted pathological specimens showing various stages of perforating ulcer of the stomach.

PAPERS:—*Diseases Frequently Mistaken for Acute Inflammatory Rheumatism*, by Dr. B. Van Sweringen. *Arthritis Deformans*, by Dr. L. P. Drayer. *The Treatment of Arthritis Deformans*, by Dr. A. P. Buchman. [These papers appear in full in this issue.]

Dr. E. E. Morgan, in opening the discussion, said that as a rule there is more redness and swelling in acute rheumatism than in arthritis deformans, and in the latter disease we rarely have heart affections. Rheumatism is also more migratory in character and the muscles more often affected than in arthritis deformans. Personally his experience had not been satisfactory in the use of the hot air treatment, even when the temperature was increased to 400 degrees.

Dr. M. F. Porter, in differentiating osteomyelitis from rheumatism, said that in rheumatism the pain partakes more of the nature of tenderness on movement. This is not so in osteomyelitis. Tenderness in rheumatism is on the surface while it is deep in osteomyelitis. The pain in osteomyelitis in the majority of cases is more apt to be worse on movement only. Rheumatism is migratory, osteomyelitis is not.

Dr. K. K. Wheelock reported that he had seen an interesting case in which the differential diagnosis of the joint affections was in doubt. Patient had a maxillary antrum trouble accompanying an attack of influenza. Subsequently the knee and elbow joints became very red, swollen, tender and painful. The patient was placed on salicylates and the condition controlled somewhat, but the arthritis did not disappear until after the maxillary antrum had been opened and a tablespoonful of foetid pus removed.

Dr. S. D. Sledd thought that in acute inflammatory rheumatism the muscles are not usually atrophied, whereas in arthritis deformans there is more or less atrophy and the muscles do not regain their action completely. In acute inflammatory rheumatism, even though there be no cure, the muscles regain their form. In a series of 87 cases where hot air and hot water had been used in the treatment, there were eleven cases of arthritis deformans, in none of which beneficial results were secured from the treatment. In the most obstinate cases of acute rheumatism, however, the result from hot air and hot water treatment were satisfactory.

Dr. A. P. Buchman said that every case was a law unto itself, and the individual characteristics of the patient should be carefully studied if results are to be secured in the treatment of either rheumatism or arthritis. Attention to dietary and hygienic regulations are a necessity, and the patient must be under the absolute control of the physician if relapses are to be prevented. In arthritis deformans no satisfactory results should be expected short of prolonged treatment, and the patient should be advised that unless the treatment is to be rigidly followed over a protracted period it should not be commenced.

The treasurer reported that there was a balance on hand at the beginning of the year of \$88.14. The receipts for the year 1904 were \$231.10.

The Secretary's report showed that the membership was 78, an increase of 12 since last year. During the year there had been a total loss of seven members, five by withdrawal, one by death and

one by suspension. During the year, 22 regular meetings and three special meetings were held. The total attendance at the regular meetings was 494, making an average of 29 5-11 at each meeting. Every meeting had been attended by numerous guests, including medical men from adjoining towns and numerous medical students from the Fort Wayne College of Medicine. The largest attendance of members at any one meeting was 38, and the smallest attendance 13. (The smallest attendance on an exceedingly stormy night). Number of papers read during the year were 40. The number of cases reported, 31, and cases exhibited 6. Specimens exhibited, 9. New instruments shown, 1. Number who took part in discussions, total 166, average per paper, 4. During the year the society lost one of its most active workers, Dr. A. E. Van Buskirk, who was vice-president of the society at the time of his death.

The reports of the Secretary and Treasurer were referred to the auditing committee.

Board of Censors reported favorably upon the application of Dr. Herman Griebel and he was elected to membership.

Dr. K. K. Wheelock made a motion to reconsider the action of the Society in granting a fifty dollar honorarium to the Secretary for his services and under the proviso that a copy of the proceedings be furnished the local medical journal for publication. The motion was seconded, and after comments by several members was put to a vote. The motion was not carried.

The usual bills were approved and ordered paid by the Treasurer.

The communication from Dr. Wishard with reference to the amendment to the present medical law was read. Motion was made and carried that the President appoint a committee to draft resolutions showing that the Society is opposed to changing the present medical bill. President appointed Drs. C. E. Barnett, S. D. Sledd and E. J. McOscar as the committee. A communication from the State Board of Health concerning the need of a laboratory of hygiene and a State home for consumptives was also read and on motion a committee was appointed to prepare resolutions showing that the Society heartily endorses the effort to secure a State laboratory and home for consumptives. The Secretary was directed to send the resolutions to the governor, and the senators and representatives from this district.

A motion was also made and carried to the effect that hereafter no member will be allowed more than five minutes for the presentation of a case except when demonstration is made, in which latter

event the time be extended to ten minutes. It was also moved and carried that the discussion of case reports be limited to three minutes.

Adjourned.

J. C. WALLACE, Sec'y.

Northern Tri-State Medical Association.

(Continued from February Issue)

Afternoon Session.

The Association again convened at 2 P. M., with two hundred members and guests present.

Some of the Clinical Results of High Frequency Currents was the subject of a very able paper presented by Dr. A. W. Crane, of Kalamazoo. (The paper appears in full in this issue of the *Journal-Magazine*). Discussion was opened by Drs. O. Hazencamp, of Toledo, and L. P. Drayer, of Fort Wayne. Neither could augment the list of excellent results obtained by the essayist, nor were they reluctant to admit that the latter were unique and much better than they could hope to realize.

Dr. Drayer had tried high frequency currents in many cases but never with satisfactory results, and while he would not speak disparagingly of the essayists' results, he would like to see the author's resonator in operation. Drs. J. A. Weitz, of Montpelier, John North, of Toledo, and Maurice Rosenthal, of Fort Wayne, also discussed the paper. Dr. Crane, in closing the discussion, said that the experiments of the discussants had probably been made with factory made machines, not of sufficient power and high frequency. His results were obtained with apparatus made by himself and much more efficient than any obtainable on the market.

How Shall the General Practitioner Treat Diseases of the Nose and Throat? was the subject of a paper presented by Dr. B. R. Shurley, of Detroit. The essayist thought it hard to draw the border line between the work to be done by the general practitioner and the specialist. Many physicians set themselves up as specialists when their work is limited only to cauterization of the turbinates and spurs. There is a certain amount of nose and throat work that should be done by the general practitioner. He should at least be able to recognize diseased conditions. The essayist defined a specialist as a general practitioner of long experience who had given considerable time in personal research and individual investigation and able to cope with all malformations and diseased conditions of the nose and the throat.

Dr. John North, of Toledo, discussed the paper, and deplored the fact that there are too many ready-made specialists. They attend a post graduate school a few weeks and advertise as specialists. Many important cases are allowed to go untreated because of the incompetency of these ready-made specialists to prescribe for or treat them.

President G. W. Spohn asked if the essayist was understood as believing that all general practitioners should remove tonsils and adenoids. He thought tonsillectomy and adenectomy to be something more than a simple operation if performed properly.

Dr. Shurley closed the discussion by reasserting that all general practitioners, and especially those in rural hamlets, should be competent to diagnose, treat and operate for enlarged tonsils and adenoid growths.

Pathology of Gout was the subject of the next paper presented by Dr. G. W. McCaskey, of Fort Wayne, Indiana, in which he said in part: "What do we mean by gout? If we say that gout is a peculiar disturbance of metabolism, associated with either endogenous or exogenous toxemia and local deposits of urates and other crystalline bodies in the joints and elsewhere, we will, I think, come as near a concise definition as the present state of our knowledge will permit.

The role which uric acid plays in the pathology of gout is undoubtedly important, but to claim that it is the whole thing is absurd. In the first place it is quite certain that the general symptomatology of gout is not due to uric acid.

In the first place, the introduction of large quantities of uric acid into the circulation of healthy animals does not give rise to morbid symptoms of any kind. On the other hand, there are other forms of disease, notably leukemia, in which the quantity of uric acid is very large, without the slightest resemblance to the symptom complex of gout.

Along these lines I have made extensive clinical investigations including more than one thousand quantitative estimations of uric acid. Have found that in many cases of vague metabolic disturbance, in which psychic, nervous and gastro-intestinal phenomena predominate, as much as thirty or forty grains of uric acid to be excreted in twenty-four hours without any suggestion of gout past or present. Such quantities must necessarily mean an excess in the blood.

Now, if instead of focusing our entire attention upon uric acid as the only cause of gout, we include the series of manifestations,

of which the presence of uric acid forms one, we have presented to us a very interesting though complex problem, the solution of which offers considerable promise of results. He referred to the xanthin or purin bases, all of which taken together play an extremely important, even though incidental role in the pathogenesis and symptomatology of gout. Purin itself is a hypothetical compound. Uric acid is the most highly oxidized of all the purin bodies. Typical or tophaceous gout gives local pathology. There is no doubt that there is a close relation between the nervous system and gout. Have seen more than one case result from nervous strain.

Dr. Wm. S. Dickey, of Toledo, opened the discussion. Thought the weight of evidence at present was in favor of the theory that uric acid had something to do in the production of gout. Certain it is that there is an increase of uric acid in the blood during an attack of the disease. The exact chemistry that is essential to bring it about is not so apparent. Uric acid is derived from the purin bodies and is either "endogeneous" or "exogenous" according as it is from the nucleins of the body or from the food stuffs eaten. Four other compounds are derived from nuclein and are called nuclein bases. These are xanthin, hpyoxanthin, adenin, and quanin. The changes seen in the joints and elsewhere in the body are the result of the deposit of soda biurate. This possibility is brought about by the quadriurate coming in contact with the sodium carbonate of the blood, the former being an unstable product. Whether the alkalinity of the blood is materially changed is not definitely determined, but the probabilities are that it is not materially augmented.

There is a necrosis of the cartilages which according to Van Noorden and Ebstein is due to a ferment of some kind, and is therefore primary, while His and others think it is secondary. The deposit takes place where the current is slow and the temperature lowest, as in the peripheral portion of the joint cartilages and where the amount of sodium chloride is highest. The deposit is not on the surface, as it appears to the naked eye, but is interstitial. Sooner or later the ligaments and fibrous structures become involved. Urate of soda thickening of the coats of the peripheral arteries due to uric acid compounds is found.

Dr. R. C. Longfellow, of Toledo, in discussion, said the blood gave no special light on the pathology of gout, yet in the investigations of the blood he had noticed that the granules of eosinophiles take the stain with unusual brightness, and appear larger in gouty conditions than in other allied diseases. The teaching of Garrod,

that the blood is alkaline, has been disproved, the increase of leucocytes is very uncertain, mixed leucocytes have been seen, but in all gouty conditions, the increase of eosinophiles are always present. Anemia existing with gout will exhibit more of the anemic signs in the blood than of gout, yet an acute attack of gout has been demonstrated by the sudden and large increase of the leucocytes.

Upon motion a recess of five minutes was taken to allow the membership committee to secure new members. On being called to order, the Association passed a motion to accept the invitation of the Fort Wayne profession to hold its next meeting at that place, and voted to suspend the by-laws and leave the date of the next meeting to the Executive Committee.

The Local Manifestation of Cancer and Sarcoma was the title of a paper by Dr. Theo. A. McGraw, of Detroit.

Dr. Miles F. Porter, of Fort Wayne, opened the discussion. Tumor is often not the first sign of cancer of the breast noticed. Within a week had a woman come to office on account of retraction of the nipple. Only slight hardness beneath the nipple could be found on palpation. To wait for tumor or any other really significant signs of cancer of the stomach before operating is to wait too long. Celiotomy for diagnostic purposes should be done early in these cases, for it is the only means now known of making a timely diagnosis.

Dr. J. C. Fleming, of Elkhart, said he thought malignant tumors should not be operated on after the time when such tumors are considered favorable for operation as metastasis may thereby be hastened.

Dr. Hal C. Wyman, of Detroit, thought mistakes might better be made on the safe side, and had seen good results in selected cases from the starvation method of treatment.

Dr. M. I. Rosenthal, of Fort Wayne, stated that a fixed uterus and infiltrations of the broad ligaments may prove more operable than one movable and apparently operable.

Dr. K. K. Wheelock, of Fort Wayne, thought some cases of sarcoma of nose and throat were often removed when a diagnosis of polypus, etc., had been made.

Dr. G. F. Lydston, of Chicago. In cases of leukoplakia, caustics enhance the formation of malignant disease. Whenever a syphilitic lesion does not respond to the iodides, the knife should be resorted to.

Dr. McGraw, in closing the discussion, said that any tumor of the breast ought to be cut off, but not every tumefaction.

The Border Line of Ophthalmology to General Medicine was the

subject of a paper read by Dr. K. K. Wheelock, of Fort Wayne, Indiana.

Drs. Walter H. Snyder, of Toledo, and Budd Van Sweringen, of Fort Wayne, briefly discussed this paper.


Dr. Dudley P. Allen, of Cleveland, was to have read a paper, but being unable to prepare one, he made a few remarks relative to a paper that he expects to present to the profession in the near future on "Defects of the Skull and Their Repair." He related some experiments he had made in plastic skull operations, grafting a layer of the skull of the required area to fill in unprotected areas.

The finance committee then reported, and the Association voted to allow all bills of expense incurred by the session.


The committee on membership reported favorably on a large number of applicants and the latter were elected to membership by the unanimous vote of the Association.

The Association then adjourned, and in the evening was royally entertained by the Toledo Academy of Medicine and Lucas County Medical Society at the St. Charles Hotel, where a delightful banquet was tendered.

E. T. MORDEN, Sec'y.



NEWS NOTES *and* COMMENTS



Death of Dr. David J. Swartz.

Dr. David J. Swartz, of Auburn, Ind., died at Liberal, Kansas, on Friday, March 3, 1905. The doctor had not been enjoying the best of health for some months, and to escape the severity of the Indiana winter, he, with his wife, Dr. Vesta M. Swartz, left late last fall to spend the winter in Oklahoma and Southern Kansas. His death came very unexpectedly as he had recently shown marked improvement in his condition. Dr. Swartz was one of the well known physicians of Northern Indiana, having resided in Auburn for over forty years, during which time he had been actively engaged in the practice of medicine and surgery, except such time as he was in the service for his country during the civil war. He was a graduate of the Medical College of Ohio, class of 1860, and later took post-graduate courses at the Bellevue Hospital Medical College. During the civil war he made for himself an enviable reputation as assistant

surgeon of the 100th Regiment Indiana Infantry. During the summer and autumn of 1900 he visited a number of European hospitals on a trip which he made that year through England, Germany, Switzerland and France. He was a member of the American Medical Association, his State and county medical associations, and numerous other medical societies. In his home city he had held numerous positions of honor and trust, and had borne an excellent reputation for ability in his professional work. He leaves a wife, Dr. Vesta M. Swarts, a very prominent physician of Auburn, and two sons, Harry J. Swarts, a train dispatcher on the Illinois Central Railroad, and Dr. W. W. Swarts, a physician and surgeon of Auburn.

Indiana Nurses Association.

The semi-annual meeting of the Indiana State Nurses Association will convene in Fort Wayne April twentieth and twenty-first. It is hoped this item may be brought to the attention of all Indiana nurses and that they will make a special effort to attend. A very interesting program is being prepared, and among other reports will be that of the legislative committee who had such success with the bill just passed in this state.

BOOK REVIEWS

"The Story of New Zealand."—By Professor Frank Parsons the well known writer and authority on law, economics and sociology; edited and published by C. F. Taylor, M. D., editor and publisher of "The Medical World" and of "Equity Series." 1530 Chestnut Street, Philadelphia, Pa. Handsomely bound in cloth, fine, heavy paper, over 150 illustrations, many of which are full page. 836—xxiv—860 pages; price, \$3.00 net.

This book gives the political, industrial and social history of the people of New Zealand. It is the first attempt to give anything like an adequate account of the laws and institutions that have placed New Zealand in the first rank of those countries which have made most progress toward industrial freedom. The wonderful progress of New Zealand and the methods by which it has been attained, is told in a forceful, clear and vigorous, though charming manner. The subject matter is of interest to any person interested in politico-economic development. Until the appearance of this book but little was known regarding the progress of the common-

wealths of the South Pacific, particularly New Zealand, outside of information contained in newspaper reports and magazine articles necessarily disconnected and incomplete. As the publisher well says: "When we learn that since 1899, in a country much like our own, peopled by Anglo-Saxons, policies have been adopted which turn the developing forces away from the production of millionaires and paupers, and toward the diffusion of wealth among the people who create the wealth; which have substituted industrial peace for strikes and lockouts; which have reduced the rate of interest to a low rate; and which have done and are doing more than has ever before been accomplished for the masses of the people, we must realize that New Zealand has an important message for the rest of the civilized world." The fact that Professor Frank Parsons, of Boston, the well known writer and authority on law, economics and sociology, is the author of "The Story of New Zealand" is a sufficient guarantee that the book has been carefully and accurately written. The book is printed on fine heavy paper with over 170 illustrations. It contains 861 pages, and is well worth the price (\$3.00) asked by the publishers.

A. E. B. JR.

Practical Pediatrics.—A Manual of the Medical and Surgical Diseases of Infancy and Childhood. By Dr. E. Graetzer, Editor of the "Centralblatt Fur Kinderheilkunde" and the "Excerpta Medica." Authorized translation, with numerous Additions and Notes, by Herman B. Sheffield, M. D., Instructor in Diseases of Children, and Attending Pediatricist (O.P.D.), New York Post-Graduate Medical School and Hospital; Visiting Pediatricist to the Metropolitan Hospital and Dispensary, etc. Pages XII-544. Crown Octavo. Flexible Cloth, Round Corners. Price, \$3.00 net. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia.

This volume will prove helpful as a means of ready reference. It is a condensed encyclopedia; the subjects are arranged alphabetically.

It is not presumed that this work will take the place of more extended treatises.

B. VAN S.

Eye, Ear, Nose and Throat Nursing.—By A. Edward Davis, A. M., M. D., Professor of Diseases of the Eye in the New York Post-Graduate Medical School and Hospital, and Beaman Douglass, M. D., Professor of Diseases of the Nose and Throat in the New York Post-Graduate Medical School and Hospital. With 32 illustrations. Pages XIV-318. Size, 5 1/2 x 7 7/8 inches. Extra Cloth. Price, \$1.00 net. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia.

This book should be in the hands of every trained nurse, for which it has been primarily written, but it will prove valuable to students and general practitioners as well. It is a guide for the intelligent care and nursing of the various diseases of the eye, ear, nose and throat, and is a means of instructing the nurse as to her exact duties during and following operation upon these organs. Particular atten-

tion has been given to antisepsis and asepsis, a subject which cannot receive too much force. A brief outline of physiology and anatomy of the eye, ear, nose and throat has been given in order that the nurse may better understand the subjects under consideration. The book is admirable in every particular, and is worthy of wide circulation.

A. E. B. JR.

International Clinics.—Vol IV. Fourteenth Series. 1905. J. B. Lippincott Co., Publishers, Philadelphia.

These publications are now so well known that a critical review in these columns is unnecessary. The present volume is on a par with its predecessors. The paper on the excessive use of drugs, by George Hayem, is timely. It is also interesting to read of the results obtained in the treatment of rodent ulcer, lupus and epithelioma by radium, which has so lately come as a claimant for professional favor. Without further mention, it may be said to be *all good*.

B. VAN S.

Hand-Book of the Anatomy and Diseases of the Eye and Ear.—For Students and Practitioners. By D. B. St. John Roosa, M. D., LL. D., Professor of Diseases of the Eye and Ear in the New York Post-Graduate Medical School; formerly President of the New York Academy of Medicine, etc., and A. Edward Davis, A. M., M. D., Professor of Diseases of Eye in the New York Post-Graduate Medical School; Fellow of the New York Academy of Medicine. 300 Pages. Square, 12 mo. Price, extra cloth, \$1.00 net. F. A. Davis Company. Publishers, 1914-16 Cherry Street, Philadelphia, Pa.

This handy volume of 300 pages is an abbreviated though exceedingly reliable guide as to the principles of modern treatment of diseases of the eye and ear, and the anatomy of these organs. It gives the essence of all that is required by the student or general practitioner as a reference work and will be appreciated by those who desire the bare facts without the embellishment contained in the more comprehensive books.

A. E. B. JR.

How to Attract and Hold an Audience.—A Popular Treatise on the Nature, Preparation and Delivery of Public Discourse. By J. Berg Esenwein, A. M., Lit. D., Professor of the English Language and Literature in the Pennsylvania Military College. Hinds & Noble, Publishers, 31-33-35 West 15th Street, New York City. Cloth. Price, \$1.00.

This little book is intended to offer hints and helps to speakers who have had but little or no opportunity to take a course in public speaking. It aims to teach the speaker to attract and hold the attention of one or more hearers, and convince them. It offers guidance to not only the beginner, but valuable suggestions to every clergyman, every lawyer, every teacher, every man or woman occupying an official position, and every citizen who is called upon to speak in public.

A. E. B. JR.

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By Albert P. Brubaker, A. M., M. D., Adjunct Professor of Physiology and Hygiene in the Jefferson Medical College; Professor of Physiology in the Pennsylvania College of Dental Surgery; Lecturer on Anatomy and Physiology in the Drexel Institute of Art, Science and Industry; Fellow of the College of Physicians of Philadelphia. Tenth edition. Revised and enlarged. With illustrations and a table of physiologic constants. Philadelphia. P. Blakiston's Son & Co., 1012 Walnut Street. 1900.

This compend on physiology by Dr. Brubaker is a little volume of 250 odd pages, rather closely printed, and therefore contains considerable matter. The author has thus been enabled to include a very satisfactory outline of the science of physiology. It is not, of course, full enough, nor is it intended to take the place of the text book, but it is a great deal more than a simple catalogue of the most prominent facts. It is cordially recommended to those for whom such a work is necessary.

G. W. M.

How to Study Literature.—A Guide to the Intensive Study of Literary Masterpieces. By Benjamin A. Heydrick, A. B. (Harvard), Professor of English Literature, State Normal School, Millersburg, Pa. Third edition. Revised and enlarged. Hinds, Noble & Eldredge, Publishers, 31-33-35 West 15th Street, New York City.

This book is intended as an aid in the study of literature. Its aim is to facilitate the appreciative study of literature as literature. It furnishes means by which the student can ascertain the characteristics of the book studied. The value of the book is increased by a list of recommended reading which not only names the chief writers in American and English literature but also designates the best books by each author and the very book or selections one should read if he would get a fairly representative view of each writer. This latter feature alone is worth the small price, 75 cents postpaid, which is asked for the book.

A. E. B. JR.

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IRWIN HIBBS, M. D.

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EDITORIALS

Boric Acid Poisoning.

We print in this issue a paper on the above subject by Charles L. Best, taken from the transactions of the Chicago Pathological Society. We think its appearance timely. Surgeons have long used boric acid as though it was absolutely impossible for it to do harm. Large quantities are habitually packed against the cervix after trachelorrhaphy and held by tampon. In the case reported in Best's paper six (6) ounces was inclosed in a wound made for the removal of inflamed inguinal glands and the incision sealed with collodion.

Then, too, nurses have come to think that there is no limit to its use. Saturated solutions are made by them for sterilizing (?) the babe's mouth at birth and before each nursing.

A few years ago the writer lost an infant which was apparently vigorous at birth and did well for two or three days. It was breast-

fed. The mother was healthy and the father also. At the end of this time symptoms of a violent gastro-enteritis made their appearance and in a few days more the infant perished. No post mortem examination could be obtained. The writer knows of nothing which was given to that infant save the breast and sterile water. Of course the mouth was scrupulously cleansed (?) with saturated boric acid solution each time it was put to the breast. But he has never allowed an infant's mouth to be cleansed with boric acid solution since then, and has always attributed that infant's death to the drug.

Packed against the cervix for a day or two without removal the writer has seen evidences of its action in a red, raw surface, oozing minute drops of blood; a condition not to be desired.

Professional opinion will, we think, change some in regard to boric acid when it is known that it is a lethal agent in some instances.

B. VAN S.

Anti-Tuberculosis Crusade in Vermont.

For two years Vermont has had a Tuberculosis Commission appointed by the Legislature inquiring into the prevalence of the disease. It will now be continued as an educating body. It is proposed to "hold public meetings in every county in the state at which lectures will be delivered outlining simple precautionary measures, indicating rational treatment and dissipating foolish prejudices against sufferers from tuberculosis."—*The Nation*.

This is a wise and humanitarian move and could be copied by every state in the union with great profit. Measured in dollars and cents, to say nothing of the other and greater profits that will accrue from it, this move on the part of the Vermont Legislature will prove of more worth to the people than any purely commercial law ever enacted by it.

M. F. P.

Need of More Nurses.

On November 5, 1905, a patient in St. Joseph's Hospital, New York, while delirious, jumped from a window and was fatally injured while the attendants were absent at evening prayers.

"God is everywhere;" One need not go to the chapel to find him. Everyone who puts his soul into his work has God with him all the time. It seems silly to suppose that one must shirk his duty to seek an audience with the Almighty. Let us be reasonable in our rev-

erence. The prayer of the soul is often expressed by the hands. However, our purpose in citing the above incident is to use it to emphasize the fact that in many hospitals there are too few nurses. Numerous incidents similar to the above might be given to prove this assertion. No matter how short of funds a hospital may be there can be no adequate excuse for lack of competent nurses. Economy that endangers life or health is a crime. M. F. P.

The Need for a Careful Study of Therapeutics.

There seems to be an awakening on the part of some of the laity at least, to the dangers of indiscriminate drugging. This is apparent from the crusade inaugurated by the *Ladies Home Journal* against the so-called patent medicines. The April issue of this publication contains a most "diabolical patent medicine story" detailing a conversation with the manager of a patent medicine business in which it is acknowledged that the demand for the remedy is created by encouraging the tendency to morbid introspection or hypochondriasis. It is admitted that if it were not for the "hypos" the patent medicine houses could not pay expenses. By "hypos" he means people who are sick only in imagination. The *Journal* also details the methods used to obtain testimonials, which certainly are criminal not only on the part of the firm but on the part of those giving such false testimonials.

A writer in the *Fort Wayne Journal-Gazette*, of March 27, 1907, attempts to defend the taking of patent remedies by the laity principally upon the plea that patent medicines have been taken by him with benefit. He accuses physicians of being the true patent medicine users because the makers of synthetic drugs patent the process of manufacture and advertise them solely to physicians.

This brings us to the need of a careful study of therapeutics, which is the title of this editorial. There is a great deal of truth in the assertion made above. It is not the lay public alone who are the supporters of patent medicines. The profession must take its share of the blame for the existence of an evil which it loudly condemns. We do not wish to be understood as advocating that there is no good in *any* new remedy whether its process of manufacture is patented or not. But we do maintain that the profession as a whole is too easily influenced by the representatives of pharmaceutical houses and that the great majority of *new* remedies are no better than many of the old ones in their effects. Let us hold steadfastly to the old, tried, well known drugs until we are put in pos-

session of the physiological action of the newer applicants for professional favor. Then let us study the action, the effect on blood pressure, on muscular tissue, on nerve tissue, on secretion, on excretion, etc., before we make application of such new remedy to the relief of ills afflicting suffering humanity. When one hears a doctor say that he prescribed Mensalol for a patient one always feels like asking what that is, and nine times out of ten the prescriber not only doesn't know the formula but he doesn't know the physiological action of the preparation. He only knows that some representative left a sample with him, together with the statement that it was good for certain conditions.

Under present conditions we feel like endorsing the attitude of the therapeutic nihilist, believing that less harm can come from that course than from the unscientific and indiscriminate drugging indulged in by many of the profession.

B. VAN S.

The Indiana State Medical Association.

The annual meeting of this Association is to be held at West Baden-French Lick, Wednesday, Thursday and Friday, June 7th, 8th and 9th. The place of meeting is ideal in every respect. Not only will the hotels furnish ample accommodations, but as a health resort the place offers many features of interest to the medical profession. The local committee of arrangements is preparing to entertain the visitors royally, and a large attendance is anticipated. Dr. Heath, Secretary of the State Association, has recently sent out notices calling attention to the fact that papers to be read at the annual meeting should be sent to him within the next thirty days. With the three days session it is thought that not only more papers may be presented, but their discussion given more time. The Council and the House of Delegates will meet during the evening preceding the first day of the session.

Reciprocity.

To give a dollar for a doughnut is not reciprocity in the true sense. It may suit the man who gives the doughnut for the dollar but not the one who gives the dollar for the doughnut. The former may be quite willing to continue reciprocating in this fashion indefinitely but the latter will soon grow tired. States who admit to their examinations only those who give evidence of having taken a thorough medical course in a first-class college after having had an adequate

preliminary education can not be expected to reciprocate with states whose requirements are much below these. One of the first moves in the direction of medical reciprocity between the different states should be an agreement between them on a common standard of requirements. One might, at first thought, conclude that any state should admit to practice within its boundaries any one licensed by another state whose requirements were more rigid than its own, and certainly admissions under such circumstances would prove beneficial rather than otherwise to the people of the state thus admitting them, but the writer is inclined to the opinion that we are still too humane to thus tacitly acknowledge that our neighbors are better than we. As against the plea for a common standard of requirements between the states it has been urged that it is not reasonable to require as much of him who desires to practice—say in Arkansas—as of him who desires to practice in New York. This argument is to the writer lame. If good, and followed to its logical conclusion, there should be several grades of requirements in each state, dependant upon the ability of the people of the community in which the applicant desires to practice, to pay for and to appreciate medical service. Next to “getting together,” in the matter of requirements it should be kept constantly in mind that progress along this and all other lines of like legislation will be rapid in proportion as we steer clear of partisan politics.

M. F. P.

Nervous Symptoms Following the Use of Digitalis.

We would like to know how many of the readers of this journal have seen delirium or marked change in disposition ensue upon the exhibition of digitalis in heart affections.

H. O. Hall, in *American Medicine*, March 25, 1905, Makes this claim for the drug and supports the contention by quoting from Babcock's work as to similar effects noted by him.

It would be interesting to confirm this statement, and it ought not be difficult of confirmation because it can be verified by every practitioner for himself.

If any one has noticed such marked change in disposition, described by Babcock as a tendency to moroseness or taciturnity, or even delirium and hallucinations as observed by Hall in a case about to be committed to an asylum, we should be glad for a report of the case. On the other hand, we should be glad if those who have used digitalis frequently and failed to notice any such action would drop a line to the editorial office stating such to be the case. B.VAN S.

ORIGINAL ARTICLES

No paper published or to be published elsewhere as original will be accepted in this department.

*Use and Abuse of Measures to Secure Asepsis.**

BY

MILES F. PORTER, A. M., M. D.,

Professor of Surgery and Clinical Surgery in the Fort Wayne College of Medicine.

My mission here today is not to relate a new story, nor to clothe an old one in a more attractive garb; to attempt either would be presumptuous. I want simply to re-tell an old story which my clinical experience leads me to believe needs repetition.

Absolute asepsis in a wound is impossible.

Germ and a wound are not alone sufficient to produce sepsis.

Too strenuous efforts to secure asepsis may cause septic infection.

In the conservation of the inherent resistance of the tissues the surgeon has one of the most, if not the most, efficient weapon against infection.

The most perfect method of securing practical surgical asepsis is that which considers both of the elements which enter into the question and determine the manner of wound healing, viz., the resisting power of the tissues against bacterial invasion and the bacteria themselves.

Germicidal agents are, when applied to the cellular elements of the body, in a measure devitalizing agents.

It is quite possible to do harm by efforts to avoid danger. Not all the unpardonable insults to the tissues are bacteriologic in nature. They may be mechanical, chemical or thermic. Many wounds become infected (clinically) through traumatisms inflicted for the purpose of avoiding infection, that would escape infection without these traumatisms.

It is team work that counts in foot-ball, whist and polo, and not individual play. And it is team work that counts in surgery. The surgeon must work with nature. He, who, in disobedience to this rule, attempts an individual play, will quite certainly often be "downed for a loss."

Tait's recognition of the reparative forces existing in the tissues, and the necessity of conserving it, was the corner stone of the foundation upon which was built his superb reputation as a surgeon.

The tendency is growing daily, not to fear pathogenic bacteria less, but to respect more fully nature's ability to protect herself against them. The tendency is shown by the passing of the carbolic spray, the antepartum douche and the antiseptic wash for non-infected wounds, into that oblivion from which it would have been better had they never emerged.

In further illustration of this same tendency may be noted the change in the dictum:—"when in doubt, drain," to:—"when in doubt, don't drain."

The abolition of all sutures when possible, and the use of absorbable buried sutures in place of non-absorbable through-and-through sutures are further indications along this line. In my judgement there is still much room for improvement. In some institutions, and with many in private practice, it is the custom to wash every new-born child's eyes with silver nitrate solution *a la* Crede. This practice deserves condemnation. It is permissible and perhaps wise to use this method in children born during the existence of a known infection in the mother. However, I am personally of the opinion that even in these instances it is better to wipe the child's lids with a sterile towel the instant the head is born and as soon thereafter as possible flush the conjunctival sac with warm boric acid solution, after first completely cleansing the surrounding cutaneous area. The likelihood of bacteria getting into the child's eyes before the head is born is not great, and even if they do, infection is by no means certain to follow. On the other hand it is decidedly questionable whether the instillation of silver nitrate solution into the conjunctival sac will prevent infection or whether, on the other hand, it will enhance the probability of infection arising. My own opinion is that given two eyes with gonococci in them, one to be washed with boric acid solution and the other with nitrate of silver solution, the former will be the less likely to show signs of infection.

I know of the case of a doctor who, during an operation for tracheotomy in a case of diphtheria, had some of the material from the child's wind-pipe coughed into both eyes. The oculist consulted flushed both eyes thoroughly with a solution of bichloride of mercury. There followed a most painful conjunctivitis, the patient being unable on account of swelling to open either eye for three days, but there was no false membrane or other distinctive sign of diphtheria. A few years later the same doctor met with the same accident but refused to allow the use of any irritant wash, simply douching the eyes once

with warm boric acid solution. There followed not the slightest sign of infection.

In addition to the ordinary experience of a surgeon I have for twenty years been acting in the capacity of surgeon to the Wabash Railroad, and through this connection have had a large number of cases of injuries to deal with, so that altogether I feel that I might speak with some authority on the treatment of this class of cases.

Formerly I made strenuous efforts to remove all foreign particles such as dust, cinders, pieces of tissue, either soft or hard, that seemed so nearly detached as to make their vitality questionable. To do this necessitated opening up and carefully examining all the cracks and crevices of the wound, going over them with a sponge or curette in addition to vigorous scrubbing with a brush and application of antiseptic lotions. Stitches were freely used to secure coaptation, drains frequently placed, incisions often made to evacuate blood and dressings were changed every few days. All of this, of course, was in accord with the teachings and practice of the day, and perhaps accords with the ideas of the majority of the surgeons today, though there can be no question but that the tendency is to less strenuousness along these lines. Having always had more than usual faith in the *vis medicatrix naturæ* I began to put this faith in practice, notwithstanding frequent warnings from some of my surgical brethren that I would thereby come to grief. Today not one suture is used where formally a hundred were used. The scrubbing brush has been practically discarded and completely so in the immediate neighborhood of the wound. Blood is left to be absorbed. Dressings are not changed until healing is practically accomplished, unless there be some good and sufficient reason for doing so. The curette is not used and no attempt is made to secure even perfect macroscopical cleanliness of the wounded structures, nor of the skin in the immediate neighborhood. Fragments of bone, unless entirely detached, are let alone, and ragged soft parts are rarely "trimmed." Adhesive plaster is largely used instead of sutures, and when the latter are necessary, absorbable material is used and the sutures are buried. Prolonged immersion in antiseptic solutions, used mild to enhance their penetrating power and reduce their irritant effects on the tissues, has taken the place of the brush and curette and largely supplanted even the use of the sponge in the wound. Splints to secure local rest are used more often than formerly and more of the patients are required to remain in bed. Drainage is infrequently used. This change in my practice has been gratifying to me and

satisfactory to my patients, for the results have been much better.

Irrigation of pus cavities is seldom necessary and often harmful. As a rule it is only necessary for the surgeon to establish free drainage in these cases and nature will do the rest.


Frequent dressing of suppurating wounds enhances the likelihood of serious infection and retards healing.

To destroy, remove, or in any way materially reduce the vitality of granulation tissue is to open avenues for infection. Hence granulating wounds should be subjected to this occurrence only when necessary to ward off greater danger. It is a great temptation, I know, to the surgeon oftentimes to remove stinking sloughs almost separated, but the good surgeon like the good christian, will resist the temptation.

It is often wise to pack wounds with gauze for the double purpose of securing drainage and hemostasis. I have often seen serious infection caused by the too early removal of this packing and have known fatal results to follow. Frequent dressings for aseptic wounds is as unreasonable as it would be for the housewife to open her fruit jars occasionally to see if her fruit were keeping.

Distressing and annoying results not infrequently follow too vigorous efforts at sterilization of the skin preparatory to operations. Abrasions and excoriations of the skin produced by the too vigorous use of the scrubbing brush or by too strong antiseptic applications have often produced atriæ through which infections have occurred. True it is that the majority of infections thus arising are comparatively trivial. But they are not always so. Such an infection has been known to extend to the deeper portions of the wound, and in herniotomy, for instance, to be the cause of the failure of the operation to cure. In other cases it has been known to be the cause of the subsequent development of herniæ in laparotomy wounds. Fear of infection has also to my knowledge led to the unnecessary sacrifice of limb and tissue.

I would not be misunderstood. I am not advocating less care toward prevention of infection. On the other hand I believe that infection is yet more frequent than need be, but that one of the reasons why this is true is because in our efforts to secure surgical cleanliness we have in a measure lost sight of an important factor in the problem, viz., the resisting power of the tissues. and given undue weight to the other factors. No rule of mathematical exactness can be given that will apply to all cases, but a careful weighing

of all the accumulated facts will enable us to approach as nearly an exact solution for each case as is possible. 

Perfection is not possible and it is well that it is not, for life then would be unlivable. To arrive at our El Dorado would be to lose the joy of labor. The surgeon cannot do nature's work but he can remove the obstacles which prevent her from doing it. Like a woman, dame nature responds kindly to entreaty but resents force as an insult. It is said that nature is a poor surgeon. In a measure this is true, but she can accomplish more and better work without the surgeon's help than he can without hers. The surgeon who usurps nature's functions fails; he, who in her need succors her, succeeds. How to help and not harm is the goal for which we are all striving, and to assist a little toward this goal is the object of this paper.

207 W. Wayne Street.


Boric-Acid Poisoning.

Report of a Fatal Case, with Autopsy.

BY

CHARLES L. BEST, M. S.

From the Pathological Laboratory of the University of Chicago.

The opinion appears to exist that boric acid, even in large amounts, is entirely innocuous to the human body when applied externally to wounds, suppurating cavities, etc. That this is erroneous and that the surgeon must be on his guard against its too frequent usage, as it is not impossible for a fatal issue to insue, is shown by the literature, in which five cases of severe intoxication and four deaths are reported in addition to the case at hand. These cases all resulted from the prolonged irrigation with saturated solutions of boric acid or the packing of large cavities with dry powder. 

Welch¹ reports his experience in the treatment of leucorrhea, in which he packed the upper third of the vagina with boric acid, allowing it to remain until liquefied, usually two or three days. This was repeated every seventh day. In three cases intoxication resulted, and are reported by him as follows:

CASE 1. Two hours after the first treatment the patient was found with the skin cool, pulse feeble, respiration weak, eyes sunken and dull and the mind unclouded but despondent.

CASE 2. Two days after the seventh treatment there was a marked depression of the nervous system and a pronounced acid discharge

1. Medical Record. 1888. Vol. xxxiv, p. 531.

from the vagina. The skin of the hands, face and feet were swollen, became charred and finally exfoliated. All motion was very painful.

CASE 3. Two days after the seventh treatment the patient was found in a state of collapse, low spirited, the pulse feeble, the eyes sunken, the face dusky, and general weakness. There was great pain in the vagina, the mucosa of which was corroded, and much discharge from the part. Temperature, 97.6; pulse, 60. The symptoms did not subside for a week, in the meantime the patient being at times cold, hysterical and prone to melancholy. The skin exfoliated in branny scales. All three cases recovered.

Spencer², after an operation for syphilitic necrosis of the ankle joint packed the cavity with one-half ounce of boric acid. This was repeated on the seventh day, and on the fourteenth nausea and vomiting set in, not yielding to treatment. Other symptoms were restlessness, insomnia, hiccough, weakness, emaciation, rapid pulse, some coryza, inflammation of fauces and pharynx, bronchitis, an acid discharge from the anterior nares and a well-marked papular erythema over the face, neck, arms and chest. The symptoms came on gradually, increasing for three days, when the dressings were changed, and in ten days they had disappeared.

In addition, he speaks of two cases, one in washing out a lumbar abscess, and the other the pleural cavity, with a 5% solution of boric acid, followed by death in both cases, the symptoms being nausea, vomiting, hiccough, slight temperature, bronchial catarrh, a weak, rapid pulse and well-marked papular erythema. The report of these I was unable to find.

Hun³, after irrigating the pleural cavity with 16 ounces of a saturated solution of boric acid, found his patient in the evening covered with a papular erythema, and with a rapid, soft pulse. A second irrigation on the following day aggravated these symptoms, and nausea and vomiting set in. The treatment was discontinued and the patient recovered.

Molodenow⁴ used a 5 per cent. solution very freely for washing out the pleural cavity in one patient and a lumbar abscess in another. This treatment was continued for one hour. Uncontrollable vomiting set in in both cases, followed by an erythema of the face and neck, and death from cardiac paralysis. Autopsy was not secured.

Williams⁵ irrigated freely a case of empyema, the treatment ex-

2. Northwestern Lancet. 1888. Vol. 1, p. 22.

3. Medical News, Philadelphia. 1882. Vol. xi, p. 704.

4. Tilman's Operative Surgery.

5. Unreported case of V. Williams, Chicago.

tending over a period of two months, and finally placed 5 ounces of the dry powder in the cavity. Delirium set in, shortly followed by uncontrollable vomiting an erythema over the body, cardiac paralysis and death. Autopsy was not secured.

Rose⁶ fully reports a case which may be summarized as follows:

History.—Boric acid was freely used in the treatment of a large open sore on the right thigh. On the fifth day a profuse diarrhoea set in, but there was no change in the general condition. The mind was clear, temperature normal, with pulsation slightly increased. Later vomiting set in and the granulations assumed a sluggish appearance. The boric acid was discontinued. The diarrhoea and vomiting, which consisted chiefly of mucus and water, became uncontrollable. On the ninth day the intellect was still clear, but the eyes staring, the body was bathed with a cold clammy perspiration, and there was great weakness. The hiccoughing and the vomiting were but partially relieved by morphia. The urine for the last few days was intensely acid. The temperature was 97.4; pulse, 105. Death occurred on the following day, the temperature being 96, the pulse 140. Just before death the tongue was red and moist, the vomiting almost continuous, and the urine almost completely suppressed.

Autopsy.—There were found congestion of the liver, spleen and gastrointestinal tract, with several erosions in the mucosa of the stomach. Histologically, the liver showed cloudy swelling, granular degeneration and connective tissue proliferation. The kidney tubules contained casts and the cells were swollen and granular. Much pigment was found both in the liver and kidney.

Summarizing these cases, it will be found that nausea and uncontrollable vomiting were present except in Welch's cases, all of which recovered, and all being cases in which the application was made to the vaginal mucosa, from which we may assume some difference in the absorption between this and ordinary raw surfaces. The same is true of the papular erythema of the face, neck and chest, with the additional exception of Rose's case. Depression of the nervous system and general muscular weakness is constant. In the two cases in which the temperature was recorded it was subnormal throughout. A cold, clammy perspiration was present in one-half the cases. The pulse was feeble, but of normal frequency, except in the fatal cases, where it gradually increased before death. An inflammatory condition of the pharynx, larynx and nares was con-

6. Medical News, Philadelphia. 1883. Vol. xliii, p. 199.

finer chiefly to those cases in which there had been irrigation of the pleural cavity. Delirium was present in but one case, and that just before death. The postmortem and histologic findings in the one case that came to autopsy were those of an acute intoxication. The onset varied from twelve hours to seven days, usually beginning with profuse vomiting, followed in the course of a day by an erythema, weak pulse, depression of the nervous system and general bodily weakness.

To these cases, which are all that can be found in the literature, I desire to add the report of a fatal case which I have had the opportunity to study in the laboratory of pathology of the University of Chicago:

REPORT OF A CASE.

Patient.—W. A. D., aged 36, occupation salesman, was admitted to hospital August 16, 1903, with the following history: Previous to the present trouble he had been quite well. He complained of pain in the right inguinal region, and stated that about five months previously he had noticed a swelling in this region which was diagnosed inguinal hernia. A truss was worn for four and one-half months, but the condition gradually grew worse. Suppurative lymphadenitis was then diagnosed. At this time the right ear showed signs of inflammation, and paracentesis was performed.

Examination.—The physical examination at the hospital showed both ears tender on pressure, the hearing impaired, the membranes inflamed and the right mastoid region swollen, red and painful. In the right inguinal region just above Poupart's ligament was found a large swelling, with marked fluctuation, painful on pressure and very red. Otherwise the examination was negative.

Diagnosis.—Suppurative inguinal lymphadenitis, bilateral otitis media, right suppurative mastoiditis.

Operation.—The following day the right inguinal glands were completely excised, and much pus was found. The wound was washed out with salt solution, packed with approximately 6 ounces of boric acid powder, sewed up without drainage, and sealed with collodion. A large opening was made in the right tympanic membrane at the same time. After the operation there was marked emesis of a greenish yellow fluid, which continued and became uncontrollable before death.

Course.—On the evening of the third day a diffuse erythematous and slightly papular rash appeared on the neck, chest and shoulders, with a distinct line of demarcation at the clavicle. The following

day a more diffuse papular rash appeared on the back and thighs. There was no pustule formation. The skin about the operation wound was red. On August 20, 1 a. m., there was marked cyanosis, a clammy sweat, cold feet, weak, irregular pulse and uncontrollable vomiting. Delirium set in during the last few hours before death. The patient died at 7 a. m., August 20, 1903. The rash was still visible. The temperature had increased with slight remissions from 98.4 on admission to 100.8, with a fall of 0.6 just before death. The pulse increased from 68 on admission to 138, with a decrease of 12 just before death. Respiration on admission was 16, which increased to 38 just prior to death.

Autopsy.—An autopsy was held three hours later by Dr. H. G. Wells. The body was that of a well-developed, well-nourished man, 165 cm. in length, not yet cold, but rigor mortis was present. The skin was white except for a purplish tinge above the clavicle and on the right side of the scrotum, and a brownish discoloration about the inguinal wound where the epidermis was elevated by a large quantity of serous fluid, which readily escaped, leaving the epidermis unattached. The lymph glands were not enlarged.

The operation wound, 11 cm long, extended to the abdominal muscles and was filled with a chocolate-colored grumous material. No pus was present in the wound, but beneath the peritoneum, posterior to the right rectus and extending under Poupart's ligament along the sheath of the great vessels was a cavity filled with a creamy pus from which several sinuses extended—one 5 cm in length along the external border of the right rectus to the floor of the operation wound, but separated from it by a layer of fascia 2 mm. thick, and the other along the inner side of the ramus of the ischium. The cavity was lined by a soft pinkish tissue, in the floor of which was seen the internal iliac artery, but neither this nor any other of the vessels were thrombosed. The regional lymph glands were enlarged, the mesenteric normal in size and consistency. The peritoneal cavity was free from adhesions or fluid.

The left pleural cavity contained many fibrous adhesions posteriorly, and the right was completely obliterated by the same and showed a few pinhead-sized points of calcification on the pleura. The visceral pericardium showed innumerable minute subpericardial extravasations of blood, from which the parietal layer was free.

The musculature of the heart was normal, likewise the valves, and the vessels were free from sclerosis. A large postmortem blood clot was found in the right ventricle. The blood in the heart was

mostly unclotted, of a granular, turbid appearance, with a slight magenta tinge.

The lungs showed no areas of consolidation, crepitation being present throughout. A large amount of blood and frothy fluid exuded on handling. The peribronchial glands were normal but for a few areas of calcification.

The gall bladder was distended, containing a dark, tarry bile, but no calculi were present. The liver was enlarged, weight 2,500 gms., pale and friable and on the cut surface only the centers of the lobules appeared normal, the peripheries being pale.

About the spleen there were a few fibrous adhesions. Its weight was 250 gms. On the cut surface much blood was seen, though the general consistency was about normal.

The adrenals showed no change. The kidneys showed a thick, fatty capsule, were of normal size and consistency and showed remnants of fetal lobulation. The cortex was pale and the markings fairly distinct. The capsule stripped readily, leaving a smooth surface.

The surfaces of the gastrointestinal tract were normal; the prostate showed no changes.

The cranial cavity showed a moderate amount of fluid, the longitudinal sinus containing a soft, dark clot, not adherent. The brain substance was normal. No change in meninges, skull nor the adjacent sinuses.

Anatomic Diagnosis.—Recent operation wound in right inguinal region; suppurating sinuses, subperitoneal and about the sheaths of the right iliac and femoral vessels; postmortem wound over right mastoid; bilateral obliterative pleuritis; healed calcified tubercles of peribronchial glands and pleura;; fatty changes in liver and kidney; fibrous cholecystitis; hyperplasia of vermiform appendix; subpericardial ecchymoses.

Bacteriologic Findings.—From the heart's blood: A smear was negative. No growths obtained on culture, except one tube contaminated by bacillus subtilis. From the wound in the inguinal region the staphylococcus albus was obtained.

All cultures from the different viscera remained sterile.

Histology.—Skin from the neck (Erythema). Desquamation of the stratum corneum down to the stratum lucidum; much hemorrhage into this portion of the epidermis and the gland crypts, much round and epithelioid cell invasion of the stratum malpighii;

comparatively little leucocytic invasion; distention of vessels of the musculature with blood.

The spleen showed some congestion; no other changes.

The lungs showed extensive destruction of air cells, congestion of large and small blood vessels and deposition of coal pigment, especially about the larger vessels. The air cells in many places were filled with red and white blood corpuscles. Polymorphonuclear leucocytes were numerous. A small amount of fibrin was present in a few alveoli. No bacteria were shown by polychrome methylene blue staining.

The lumen of the appendix was filled with areolar tissue traversed by fibrous bands, showing numerous round lymphoid cells at one point.

In the liver there was considerable fatty infiltration and some round cell proliferation in the interlobular septa about the ducts, but no other changes.

The vessels of the capsule and of the kidney itself were much congested; otherwise no changes.

The heart muscle showed slight increase in connective tissue, and some pigmentation of the muscle fibers.

The pancreas was normal.

The prostate showed a glandular proliferation of the epithelium and the acini filled with a hemorrhagic exudate and granular debris.

The abscess wall showed the muscle fibers scattered and a marked increase in connective tissue, also an infiltration of round cells and many red and white blood corpuscles, the latter chiefly of the polymorphous variety.

An analysis of a sample of the boric acid used in the hospital, and from which that used in this case was taken, was made, and the chemist reported it to be chemically pure.

Unfortunately, the reactions of the blood and secretions were not taken.

The lack of other causes, and the fact that clinically this case so closely resembles those previously mentioned, leaves no doubt as to the identity, all the cardinal points of boric acid intoxication being present: Profuse vomiting, a papular rash over the face, neck and chest, and a weak irregular pulse increasing before death. It differs only in its more rapid onset and course, the onset being immediate and the fatal termination in four days. The delirium and the slight rise in temperature are possibly indications of a greater degree of intoxication.

The postmortem and histologic findings in Rose's case are identical with those found here, the former being entirely negative except for a congestion of the liver, spleen and gastro-intestinal tract and a cloudy swelling and granular degeneration of the liver and kidney cells. In the latter we have practically the same findings, with the addition of subpericardial hemorrhages and fatty changes in the liver and kidney, together with discoloration and maceration of the tissues about the cavity in which the boric acid was placed.

These findings then limit the cause of death to one of two things: A toxemia, resulting either from the abscess in the groin or from the medicinal agent employed, as other recognizable casues were not present. Its resemblance to those cases previously reported, together with the demonstrated overuse of this substance, is sufficient to make a positive diagnosis of fatal boric acid intoxication. The clinical features and the lack of success in cultivating pathogenic bacteria from the blood, eliminate septicemia in this case, which is the condition most likely to simulate such an intoxication.—*Transactions Chicago Pathological Society.*

The Etiology and Treatment of Corneal Ulcerations.*

BY

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Corneal ulcerations, or, technically speaking, ulcerative keratitis, is a manifestation of infection which has been permitted to gain entrance into the tissues through a break in the continuity of the outer or epithelial layer of the cornea. The objective symptoms will vary according to the extent of tissue involved, the virulence of the infection, and the ability of the tissues to resist the infective invasion. The subjective symptoms will also vary with the extent of tissue involved and virulence of the infection, but also with the physical condition and temperatment of the patient.

The affection is recognized by not only a loss of transparency of the cornea, but a more or less pronounced break in the continuity of the epithelium as seen under oblique illumination. The vision will be impaired in proportion to the amount of loss of transparency of the cornea and its location. An ulceration with opacity of the cornea near the limbus might not produce any great impairment of vision. The majority of ulcerations of the cornea are complicated by conjunctivitis, or conjunctivitis and iritis.

*Read before the Fort Wayne Medical Society, May 10, 1904.

The most common form of ulcerative keratitis is the simple ulcer in which the cornea is denuded of its epithelium over perhaps but a small area of its surface, and has become infected either from the bacteria of the conjunctival sac or from other sources. The denuded area, which is at first transparent, soon becomes covered by a grayish film, and grayish white radiating lines of infiltration gradually penetrate into the surrounding corneal tissues. The ulcer becomes broad by peripheral extension, deeper by destruction of the corneal stroma, and its floor assumes a yellowish tint with the presence of pus. If the morbid process advances as a result of lack of resisting power on the part of the tissues, or virulency of the infection, a collection of material resembling pus in the anterior chamber may appear. It has been clearly shown that this condition, known as hypopyon, is not due to pathogenic germs in the anterior chamber, but to a deposit of fibrin and leucocytes which come from the vascular iris. If the destructive process of the ulceration terminates in perforation of the cornea the material deposited in the anterior chamber may be pus and contain all the infectiveness of the infection which has produced the ulceration.

The most common causes of a simple ulceration are the lodgment of a foreign body, inverted eye-lashes, and erosions of the cornea from traumatism. The ulcer may also owe its development to a weakening of the resisting power through a disturbance of general nutrition, particularly in children of strumous diathesis.

An infected ulcer may have its starting point in a small simple ulcer, which, through the introduction of more active bacterial agents with more rapidly destructive tendencies, ends in a purulent or deep ulcer, or a sloughing ulcer.

The purulent ulcer follows infection conveyed by a foreign body, or derived from other external sources, and is usually secondary to pre-existing contiguous inflammation. The healing of a small ulcer may be interrupted by the introduction of infection, or a purulent ulceration consecutive to gonorrhœal conjunctivitis are instances. The ulcerated area presents a bright yellow base, surrounded by an opaque zone of infiltration, and has a tendency to increase in depth and but slightly in width.

The sloughing ulcer differs from the deep ulcer in the virulence of the infection, and the tendency to involve the entire cornea in the destructive process. A sloughing ulceration may arise from very trivial injuries but spread both laterally and posteriorly, and is accompanied almost from the beginning with hypopyon and

iritis, and frequently perforates, terminating in loss of intra-ocular contents, prolapse of iris, or extensive anterior synechiæ.

The most virulent of sloughing ulcers is the serpiginous ulcer, or the ulcer of Sæmisch, which, in its typical form contains the pneumococcus either alone or in conjunction with other micro-organisms, particularly the streptococcus. The ulcer steadily invades the healthy cornea by purulent infiltration, and rarely stops until the entire cornea has been destroyed, the usual termination being perforation and escape of intraocular contents.

In the infective ulcer of the cornea cultures made from the pus taken from the ulcer will show the presence of staphylococci, streptococci, or a mixed infection. In the sloughing ulcer, or serpiginous ulcer in which the destruction extends laterally and eventually invades the whole cornea, the pneumococcus is usually found in great numbers, often in nearly pure culture. In the ordinary infective ulcer which extends deeply and sometimes ends in perforation but does not have a marked tendency to extend laterally, the infection will be found to be due to staphylococci, or a mixed infection consisting of both streptococci and staphylococci.

With the recognition of a corneal ulceration of any type, as evidenced by a break in the continuity of the epithelium and the presence of a grayish or yellowish infiltrate, proper treatment becomes of utmost importance if we are to prevent what may possibly end in total destruction of the eye or serous impairment of its function. The first and foremost thing to recognize is the infectious possibilities of any corneal abrasions, and the way to combat or exterminate them. It is not always possible to ascertain the nature of the infection itself, and the state of our knowledge does not yet allow us to affirm in a positive manner the degree of virulence of a given micro-organism. As a matter of fact it is not only a question of germs, but also of soil and of the chances of destroying the infection. Many diseases of the cornea originate from a superficial infection of a small area, perhaps of traumatic origin, perhaps the result of a neurotrophic lesion. How often after an almost imperceptible wound by a foreign body do we see produced a grayish infiltration which may now and then invade the greater part of the cornea and bring about complete loss of the latter by suppuration? The existence of the so-called constitutional ulcer, mentioned in text-books as arising spontaneously, can very properly be doubted. While a state of general malnutrition makes the propagation of an infective process

much more pronounced and destructive, yet the true ulcerative process is due to a local inoculation with infective material.

In a superficial wound of the cornea not yet manifestly infected, as produced by foreign bodies, such as particles of metal, stone or wood, it is essential that we protect the corneal wound against all ulterior infection. The conjunctival sac in general, and the corneal wound in particular, should be irrigated with a mildly antiseptic solution. Having during the past few months used the solutions of cyanide of mercury in the strength of 1 to 2, 3 or 5,000, I prefer them to the same strength of bichloride solutions which are more painful and no more antiseptic. If there is in the conjunctival sac or eyelashes a suspicious secretion, it is advisable to drop into the eye one or two drops of a 25 or 50 per cent. solution of argyrol. The eye is then covered with a simple antiseptic and occlusive dressing.

If the patient does not seek aid until there is manifest evidence of infection, as noted by corneal infiltration and the presence of discharge, the chief indication is to destroy as fully as possible the infectious agent in situ. There is no better means of attaining this end than by proper application of the galvano-cautery. In fact it is our most prompt and efficacious means for destroying the infectious agent, but in those cases where there exists a central corneal infection, too deep or too extensive a cauterization may be followed by a leucoma which will interfere much with the sight of the eye.

No little experience and preciseness in the mode of application is required in order to properly employ the galvano-cautery in the treatment of corneal ulcerations. In the first place an exceedingly fine pointed electrode is required, and the so-called small corneal electrode now furnished by many manufacturing houses is admirably adapted to the purpose. The electrode, at a dull cherry heat only, should be applied to the previously anæsthetized cornea in successive and interrupted delicate applications. The cauterizations should be carried to the healthy tissues, but not beyond, and managed with a delicacy attained only after experience.

Following cauterization the eye should be dressed with an occlusive bandage. In my hands the use of other cauterizing agents such as pure carbolic acid, 20 to 25% trichloracetic acid, and pure tincture of iodine has in a very large number of instances proved very efficacious. Their use, like that of the electro-cautery, must be with extreme delicacy to prevent destruction of sound tissue. The use of the curette presents the inconvenience of being able to

inoculate infectious germs into sound tissue when a slight scratch of the epithelium is produced.

Within the past year I have employed both with and without cauterization of the infected area by chemical or electro-cautery, subconjunctival injections, as recommended by Darier, in the treatment of infected ulcers of the cornea. The treatment is especially indicated in those cases in which evidence of active infection is present, and in which the use of caustics or galvano-cautery is apt to leave behind cicatrices or leucomata. From actual experience with the treatment I am prepared to substantiate what Darier has said with reference to the efficacy of this form of treatment when he says: "When one must combat an infection, acute or chronic, primary or secondary, arising from the outside by an erosion of the cornea, or a serious traumatism, or from the interior by a reflected or a metastatic infection, (as from syphilis, rheumatism, tubercle, etc.,) subconjunctival injections of cyanide of mercury furnish us with the most active and rapid means of stopping the morbid local process, often even after general treatment has failed or acted too slowly."

Since bacteriology does not give us a precise differential diagnosis between benign and malignant ulcers of the cornea we should behave towards all corneal ulcers as if they contained the most virulent kind of germ. I have been led to take this view because of some rather unpleasant experiences in noting the rapidly destructive action which has followed in the wake of an apparently small benign corneal ulceration. I do not hesitate in the presence of an infiltrated corneal wound, or even one merely suspected to be infiltrated, to employ subconjunctival injections of a 1 to 3 or 5,000 solution of cyanide of mercury, and have repeatedly noted the beneficial results of such treatment. In the deep infectious ulcerations of the cornea I do not hesitate to employ, by subconjunctival injection, a stronger solution of cyanide of mercury, following local cauterization by means of trichloroacetic acid or galvano-cautery. The only contra-indication to the injection is the existence of chemosis and occasionally marked swelling of the eye-lids. The injections may be repeated in one, two or three days, according to the progress of the case. It is better to give them too often than too little and repent of it. In fact all the harm they can do is to cause considerable pain if repeated too often, and inconvenience to the patient from the occasional chemosis and swelling.

Another remedy which has recently been introduced into ocular therapeutics, and successfully employed as supplementary treatment of ulcerations of the cornea, is dionin. This remedy exerts a most favorable action, in view of its lymphagogue properties, in the treatment of infiltrations of the cornea. In these cases dionin stimulates the nutrition of the cornea and hastens regeneration of the epithelium. By quickening absorption dionin favors the clearing of the corneal tissue of infective material. By alternating the applications of dionin in five per cent solution with subconjunctival injections of cyanide of mercury in 1 to 2 or 5 000 solution, we have the most prompt and effective treatment for infective inflammations of the eye-ball now known.

Dionin produces beneficial results by stimulating the lymphatic and vascular circulation. A short time after the application the lymphatic channels become so distended and dilated as to attain many times their original dimensions. The conjunctiva becomes enormously swollen, forming a great pad around the cornea, and having the characteristic aspect of conjunctival œdema and chemosis. The eye-lids may be noticeably swollen, and the eye so puffed up as to make its state alarming, especially in elderly persons with impoverished circulation, but experience seems to prove that there is no danger to be apprehended. Aside from the lymphagogue and absorbative effect dionin also has a marked analgesic effect which makes its use especially indicated in painful eye affections, of which corneal ulceration may be included.

The beneficial effect of a pressure bandage should not be overlooked in those cases in which the cornea has been greatly weakened by loss of substance by ulceration, but in the presence of more or less discharge the bandage should not be retained for longer periods than an hour or two before the eye is thoroughly flushed with an antiseptic solution.

Too frequent cleansing may be as harmful as too little cleansing, and yet the prevailing tendency is not to wash the eye as thoroughly or as often as indicated in order to assist in the removal of infective material. In those cases where discharge is a prominent feature gentle cleansing of the cornea and cul de sac every hour is warranted.

The stimulating as well as soothing effect of hot applications should be borne in mind, but as in the case of the bandage and flushing, they are productive of harm if not intelligently applied. If continued for too great a time the nutrition of the cornea is disturbed. To be most effective the heat should be applied continuously for

one-half hour and then an interval of from one to two or three hours should elapse before the heat is reapplied.

Cocaine has no place in ocular therapeutics and is perhaps more harmful in diseases of the cornea than in any other eye affections. Cocaine not only has a dissicating action upon the cornea but creates nutritional disturbances and prevents regeneration of tissue. Aside from this the local anesthetic effect, for which the drug is most often used, is evanescent. For producing anesthesia of the cornea prior to the use of caustics or galvano-cautery, holocain in two per cent solution has all the advantages without any of the disadvantages of cocain.

For producing analgesia but not anesthesia, nothing equals dionin in five per cent solution, and one or two applications are usually sufficient to give relief from suffering in the painful eye affections for a period of six to twelve hours. Aside from this the remedy has a decidedly beneficial effect upon the infective and inflammatory process.

As a means of rendering subconjunctival injections painless, the addition of acoine to the solution to be injected is all that is necessary in order to render what would certainly be a very painful operation one that is free from discomfort. Neither cocain nor holocain are sufficient to prevent the pain of subconjunctival injection, but fortunately acoine answers the purpose effectually.

Finally, in the treatment of corneal ulcerations, one must not forget the possibilities of serious results following what at first examination may appear to be but a trivial affection. The most important consideration to be remembered is that corneal ulceration means infection, and treatment can only be considered successful when it includes removal of the infection. While, as frequently is the case in the serpiginous or Sæmisch ulceration, due to a virulent pneumococcus infection, the employment of any treatment, no matter how heroic, may not result in checking the destructive process, yet in many other infectious corneal ulcerations, prompt and energetic treatment will save a cornea that but for such treatment would be lost.

SOCIETY PROCEEDINGS

Fort Wayne Medical Society.

Meeting of January 17, 1905.

The Society met in regular session at the Assembly Room of the Court House, with President Drayer in the chair, and thirty-five members and several visitors present. Minutes of previous meeting read and approved.

CLINICAL CASES:—A case of *Pneumonia Simulating Appendicitis* was reported by Dr. M. F. Porter. The patient had been brought for operation, having been taken sick a few days before with pain in the right iliac region, tenderness on palpation in the region of the appendix, together with muscular rigidity and temperature of 103. The rigidity was most marked at the junction of the back and side. Operation was delayed twenty-four hours, during which time the local symptoms improved but the temperature became higher following a chill. Taking these latter symptoms into consideration, a thorough physical examination was made which resulted in finding complete consolidation of the right lung. Case ended by crisis and the patient went home convalescent.

In discussing the case Dr. E. J. McOscar said that while pneumonia was the essential trouble, yet the appendix might also have been affected.

Dr. B. Van Sweringen said that cases of referred pains in chest lesions are quite common. It should be remembered, however, that the pneumococcus can produce appendicitis.

“*New Method of Treating the Wound After a Tracheotomy.*” Dr. M. F. Porter reported a case in which a tracheotomy was performed for the removal of a foreign body in the trachea. There being no evidence of infection present the tracheotomy wound was closed immediately, the soft parts with subcuticular catgut stitches and the skin with adhesive. The case, together with another treated in a similar manner, got well so much better than in the old way that he considers it advisable to always close a tracheal wound at once if infection is not present.

A case of *Intussusception in a Child, Together with Formation of Tumor, Reduced by Surgical Anæsthesia*, was reported by Dr. Porter. The pain, vomiting and all other symptoms were characteristic. There was absolute obstruction of the bowel except for the passage

of mucus and blood. The diagnosis being clear the patient was put under the influence of an anæsthetic with a view to operation. While being transferred from the wagon to the operating table there was a large movement of the bowels and the tumor, which was at the upper and inner portion of the right iliac region, promptly disappeared. Dr. Porter said that in his opinion the reduction was due to the surgical anæsthesia.

Commenting on the case Dr. McCaskey reported a similar case in a child aged six. A smooth moveable tumor in the left iliac region persisted for a period of two weeks when it suddenly disappeared. It was a fecal tumor.

Five cases of *Appendicitis of Rapid Development* were reported by Dr. M. I. Rosenthal. In three cases rupture occurred within forty-eight hours after the initial symptoms. In all of the three cases there was more or less peritonitis. A fourth case giving all of the typical signs of appendicitis was operated on twenty-four hours after the initial symptoms. No adhesions were found but the appendix was filled with pus and removed. A fifth case operated disclosed an appendix not ruptured but the tip gangrenous.

Loss of an Eye from Infection Accompanying a Cinder in the Eye was reported by Dr. K. K. Wheelock. Three or four days after the cinder was removed the patient returned presenting injection of the eye and a very minute area of infiltration in the locality previously occupied by the cinder. The wound was curetted and afterwards cauterized with a 2% solution of trichloroacetic acid. Later a subconjunctival injection of 1-30 grain of bichloride of mercury in solution was given. Decided reaction occurred but the spreading of the corneal ulcer was not checked. The patient was then given subconjunctival injections of cyanide of mercury, but in spite of all care the cornea finally perforated and the eye was completely lost. The doctor concluded by saying that a cinder in the eye is usually considered inoffensive, but that it is not without an element of danger from the fact that infection of the cornea may be introduced with the cinder and eventually the eye lost.

Commenting on the case Dr. Porter said that he believed the subconjunctival injections gave more trouble than would have occurred had such a treatment not been adopted. He thought the injections produced an irritation which only gave food for the development of the infection.

Dr. M. I. Rosenthal said that subconjunctival injections are used

quite extensively in Germany, and the German oculists report good results from such treatment.

Dr. Wheelock said that he was not entirely satisfied that sub-conjunctival injections are useful, but as they are highly recommended, and other forms of treatment give no better results, he believes in giving the injections a trial in these desperate cases.

PAPERS:—“*The Kidney in Gout and Allied Conditions*” was the title of a paper read by Dr. C. R. Price. Of the visceral lesions in gout those of the kidney are the most important. While a lesion peculiar to gout cannot be said to exist, certain changes have been found which warrant their description as those commonly occurring in this disease. Owing to the frequency with which chronic interstitial nephritis is associated with gout and allied conditions, the essayist thought it advisable to describe that form of kidney, as he thinks it is more often found in these conditions than in any other. The well known gouty kidney, or interstitial nephritis which Tyson says is ultimately acquired by every gouty subject, was described, the microscopic and macroscopic findings being given at some length. The view most generally entertained is that the essential lesion is in the secreting tissues of the tubules and the glomeruli, and that the connective tissue outgrowth is secondary to this. The deposit of sodium biurate in the region of the papillæ was at one time believed to be a condition characteristic of gout, but this is not a positive indication of the disease, as the deposits have been found in the kidneys of subjects who never had any symptoms of gout. When these deposits of sodium biurate are present upon section they appear as minute whitish points at the apices of the pyramids. Upon microscopical examination they are found in the tubules and intra-tubular tissues.

“*The Pathology of Gout*” was the title of a paper by Dr. G. W. McCaskey. The essayist said that if we consider gout as a peculiar disturbance of metabolism associated with either endogenous or exogenous toxemia, with local deposits of urates and other crystalline bodies in the joints and elsewhere, we will come as near to a concise definition of the condition as the present state of our knowledge will permit. Uric acid undoubtedly plays an important part in the pathology of gout, but it is quite certain that the general symptomatology of the disease is not due to uric acid. This seems to have been proven from the fact that the introduction of large quantities of uric acid into the circulation of healthy animals does not give rise to morbid symptoms of any kind. On the other hand, there are

other forms of disease, notably leukemia, in which the quantity of uric acid is very large, without the slightest resemblance to the symptom complex of gout. The doctor said that he had made extensive clinical investigations along these lines, including more than one thousand quantitative estimations of uric acid. In many cases vague metabolic disturbances and phsyic nervous and gastrointestinal phenomena predominate. As much as 30 or 40 grains of uric acid have been found to be excreted within twenty-four hours without any suggestion of gout past or present existing. Such quantities must necessarily mean an excess of uric acid in the blood. If instead of focusing our attention on uric acid as the only cause of gout we include the series of compounds of which uric acid is one, we have presented to us a very interesting though very complex problem, the solution of which offers considerable promise of results. The xanthin or purin bases when taken together play an extremely important, even though incidental role in the pathogenesis and symptomatology of gout. Purin itself is a hypothetical compound, and uric acid is the most highly oxidized of all the purin bodies. There is no doubt but that there is a close relation between the nervous system and gout, and the doctor reported having seen more than one case of gout resulting from nervous strain.

"*The Ocular Manifestations of Gout*" was the title of a paper by Dr. K. K. Wheelock. The endothelium is primarily the point of attack in ocular inflammations of gouty origin. This accounts for the insidious character of the attack. The subjective sensations are those of unrest, or of a certain distress as of a foreign body on the cornea, with periods of intermission during which little or no discomfort is experienced. Authors recognize inflammations of the following tissues of the eye as being caused by gout: Plastic iritis, serous iritis, cyclitis, irido-cyclitis, serous and plastic choroiditis, retinitis, vetrobulbar neuritis, scleritis and episcleritis, cataract, nemorrhagic retinitis and glaucoma simplex. The doctor said that he had seen all of these forms, with the possible exception of cataract. The condition must be differentiated from the rheumatic or syphilitic manifestations in which the inflammation is generally more severe, and in which there is usually a well marked rheumatic or syphilitic history. The temperament and habits of the patient have a determining influence in the diagnosis. In some cases the absence of symptoms points to an etiologic factor upon which a diagnosis may be made, and the general insidiousness of the disease, together with the character of discomfort, leads to a diagnosis of gout. If the

condition yields to colchicum and the salicylates the diagnosis may be said to have been demonstrated.

"*The Treatment of Gout*" was the title of a paper by Dr. H. O. Bruggeman. The essayist said that the great principle of prophylaxis may be applied with some degree of success in the prevention of this infection. He quoted Strumpell, who sums up the factors to be avoided in these words: "Wine is the father of gout; feasting is its mother and Venus is the midwife." He said that he believed that the error of quantity of diet is of infinitely more importance than the error of quality. The gouty subject should, above all else, be directed to drink a sufficient quantity of good potable water. In the medicinal treatment of gout many remedies have been recommended, including colchicum, salicylates, potassium iodide, aperient waters, etc., and they no doubt assist much in the treatment, but as Sir William Roberts has said: "Nowhere, perhaps, is it more necessary than in gout to consider the man as well as the ailment, and very often more the man than the ailment."

The discussion of the symposium on gout was opened by Dr. E. J. McOscar, who said that our ideas regarding the etiology of gout have changed considerably during the last few years. Uric acid is no longer considered the whole cause of gout; as it has been demonstrated that uric acid, even in very large quantities, is found in other conditions. In the treatment of the condition an essential factor is water, which should be given in large quantities. Dieting is certainly essential, and the use of alcohol in any form should be interdicted. Potassium is not well borne by the kidneys in some of these cases, and generally speaking, gouty patients do better if potassium is not administered. Piperazin recommended in the treatment of gout is not an efficient remedy.

Dr. M. I. Rosenthal said that he had given from 30 to 40 grains of uric acid in gout, and it evidently was beneficial, for the patients came back and asked for more medicine of the same kind. It acts on the kidneys, increasing the amount of urine as well as the amount of uric acid. Uric acid combined with quinine will prevent the urticaria occurring in those patients susceptible to quinine.

Dr. A. P. Buchman said that every organ of the body is involved in the condition called gout. Treatment should be directed to the patient and not to the disease. It is the quantity and not the quality of food which favors the disease. No chemical change takes place in or out of the body except in the presence of water. The

administration of large quantities of water are therefore beneficial in the treatment of gout.

Dr. L. P. Drayer said that acute interstitial nephritis is irritative nephritis, and the force of the poison is on the interstitial tissue. Much can be done in the treatment of gout in both acute and chronic cases. He has found his patients doing better if in addition to regulation of diet and quantity of food, alkaline remedies be administered. In this connection he recommended reasonably large quantities of alkaline waters. The salicylate of sodium does relieve gouty painful affections in some individuals. The soda bath is also found beneficial.

Dr. B. V. Sweringen said that he would add to the treatment already mentioned, exercise as a regular and routine part of the treatment. Nothing is so conducive to the development of a gouty condition as inactivity coupled with the other predisposing causes.

Dr. M. F. Porter said that he could not endorse the water treatment, as it was possible to do great harm by drinking excessive quantities of fluids. He thought it unwise to place too much work and responsibility upon the kidneys.

Dr. J. C. Wallace referred to the local use of oil of wintergreen to relieve painful gouty joints.

Dr. W. D. Calvin said that gout should be considered as due to poisonous material in the system due to defective elimination. First eliminate and then look after the toxæmia.

Dr. G. W. McCaskey, referring to the kidney in gout, said that the deposits in the kidney are compound with the uratic deposits predominating. In the absence of these deposits there is no gout of the kidney, and if present it is a gouty kidney, though only an incident to the general affection. The kidney is not primarily involved. Referring to the eye lesions in a patient suffering from gout he said that because a patient has gout, and an eye trouble, it does not follow that the patient necessarily has a gouty eye. It is only in those cases where the gouty trouble occurs in a joint, and where there is a serious trouble occurring elsewhere that we are justified in calling the secondary trouble gout. With reference to the surgical treatment he expressed the opinion that large tophi will disappear in the course of time, and therefore need not receive operative attention.

Dr. K. K. Wheelock said that he had seen numerous cases of severe eye trouble in which the salicylates clear the case without local treatment. He thought that many of the unidentified in-

inflammations are gouty. For the treatment of painful joints he recommended equal parts of carbolic acid, menthol, oil of Gaultheria and sugar of lead water.

Dr. H. O. Bruggeman took exception to the 25% solution of carbolic acid as recommended by Dr. Wheelock as a local application in painful joints. He thought the application altogether too irritating, and therefore not to be recommended.

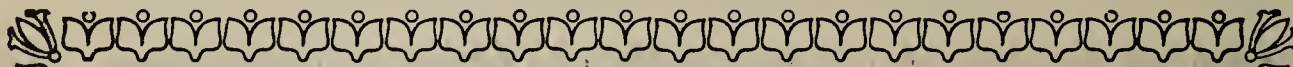
The Society passed a resolution opposing the effort of legislators and others to lessen the legal requirements in Indiana for license to practice medicine and surgery. A copy of the resolutions was ordered sent to the senators and assemblymen from the 12th district.

Dr. M. F. Porter made a motion that the Secretary be instructed to communicate with our representatives at Indianapolis advising them that the Fort Wayne Medical Society is in sympathy with the proposed law for registration of nurses. The motion was seconded and carried.


Bills for printing amounting to \$17.50 were allowed.

Adjourned.

J. C. WALLACE, Sec'y.



NEWS NOTES *and* COMMENTS



We have received the announcement of the marriage of Dr. Albert E. Sterne, of Indianapolis, and Mrs. Mercy Laughlin-Reaume, of Cincinnati, which occurred at the bride's home on March 4th. Dr. Sterne, who is well and favorably known over the State, is receiving hearty congratulations and best wishes from a host of friends. Dr. and Mrs. Sterne will occupy a magnificent home recently built near The Norways, Dr. Sterne's private sanitarium.

Dr. Albert E. Bulson, Jr., Fort Wayne, was a guest at the Toledo meeting of the American Otological Society held February 24, 1905, and presented a paper by special invitation.

The Antiphlogistine Company has recently issued a booklet, illustrated in colors, which is not only a credit to the printer and

lithographer, but the Antiphlogistine Company as well. Firms appealing to the medical profession for recognition are rapidly coming to the understanding that good paper, good type and press work, and beautiful illustrations either in black and white or colors, are not only appreciated by the medical profession, but lead to a more general reading of the advertising than occurs when the advertising matter is cheap and poorly executed.

Arrangements are being made to give a dinner to Dr. Wm. Osler previous to his departure for England to assume the Chair of Medicine in the University of Oxford. The dinner will be given at the Waldorf-Astoria in New York City, at 7:30, on the evening of Tuesday May 2nd. The subscription has been fixed at ten dollars. The invitations to the dinner are signed by a very large number of prominent medical men residing in all of the larger cities of the United States.

Battle & Company, of Saint Louis, have just issued the fifth of a series of illustrations (in color) of the Intestinal Parasites, and which will be sent free to physicians upon application.

Emory Lanphear, of Saint Louis, has retired from the editorship of the *American Journal of Surgery and Gynæcology*, and will hereafter devote his entire time to the practice of surgery and gynæcology. The journal has been sold to Dr. J. McDonald, who will change the place of publication to 92 Williams Street, New York. Dr. Lanphear has been doing editorial work for 25 years, and his labors have been appreciated by the general medical profession, but the surgeons and gynæcologists in particular.

Dr. Chas. W. Goodale, of Metz, Ind., died January 5, 1905, aged 60 years, 7 months and 24 days. Dr. Goodale graduated from Rush Medical College in 1869, and in 1884 took post-graduate work in the same institution. He practiced medicine at Metz for 20 years, during which time he established a reputation for careful and painstaking work, for ability, integrity, and a genial disposition which won for him many friends and a large practice.

The Alumni Association of the Fort Wayne College of Medicine will hold its annual meeting at the College building on Tuesday,

April 18th. The program will consist of a number of interesting papers by former graduates of the institution, and the usual election of officers. In the morning preceding the meeting, clinics by some of the professors of the College will be held at the Saint Joseph Hospital, and in the afternoon following the meeting clinics will also be held at the Hope Hospital by some of the professors of the faculty. The graduating exercises, class of 1905, will occur at the Masonic Temple, at 8:00 p. m., following which a banquet will be served at the Randall hotel.

Dr. Wm. H. Myers, of Fort Wayne, for many years one of the most widely known surgeons in Northern Indiana, recently underwent an operation at Hope Hospital for strangulated hernia. He has made a rapid and uneventful recovery.

Dr. Chas. M. Stemen, of Kansas City, has recently been visiting his father, Dr. C. B. Stemen, of Fort Wayne.

The program of the Huntington County Medical Society for the current year provides for two papers at each meeting, and one meeting each month. Dr. E. T. Dippell is president, and Dr. Erwin Wright is secretary.

Fort Wayne has an anti-spitting ordinance, which is the first fruit of the warfare recently begun against consumption, by a committee which had its origin in the Fort Wayne Medical Society. Up to date there has been no conviction under the ordinance.

MEDICAL REVIEWS

Department of Medicine and Therapeutics

In Charge of **George W. McCaskey, A. M., M. D.**
Professor of Clinical Medicine in the Fort Wayne College of Medicine, Ft. Wayne, Ind.

Blood Pressure in Arteriosclerosis.

Dunin in *Zeitschrift f. klin. Medicin, von Leyden*, has measured the blood pressure 1,000 times in 440 patients with arteriosclerosis, in his private practice. He used Gaertner's tonometer exclusively. In 120 out of 420 arteriosclerotic subjects he found the blood pressure normal or below. In all the other patients the blood pressure was above normal. In 36 out of 80 cases with low blood pressure angina pectoris was observed. In 8 cases the sharp accentuation of the aortic second sound was the only symptom on the part of the vascular system. The blood pressure in this group was only 90 mm. to 140 mm. The first sound was weak. In 2 patients there was also a diastolic murmur. None of this group complained of any heart trouble. In another group of 14 cases there were pronounced subjective disturbances and corpulence, and changes were found in the heart, or aorta, with signs indicating dilatation of the arch of the aorta and sometimes also the aortic orifice. A further group of 22 presented the same findings with the exception of the corpulence. In all his cases of normal or low blood pressure the arteriosclerosis was evidently restricted to the large arteries, while the smaller were intact. Most of the patients were middle-aged, although some were quite young. In 35.7 per cent. of 380 cases of arteriosclerosis corpulence was noted, the proportion being higher among patients of high blood pressure. Reduction of the corpulence frequently restored the pressure to normal. Functional overpressure he found very rare. Therapeutic measures to reduce the blood pressure were seldom successful except in cases of corpulence, although the general condition was much benefited by hygiene and measures to tone up the nervous system and heart muscle. So long as the heart is sound and vigorous the changes in the arteries are effectually compensated. Long-continued over-pressure entails hypertrophy of the left ventricle, although it may not be clinically evident. Measurement of the blood pressure may thus determine the size of the heart better than mere percussion. He found the pulse rapid in 40 out of 136 cases of high pressure. In one instance the pressure was 240, the

pulse 200; in another, with a pressure of 250, the pulse was 120. Fully 25 per cent. of these patients were neurasthenics. Tachycardia with high pressure presages the approach of disturbances in compensation.—*Jour. A. M. A.*

Pathologic Role of Intestinal Poisons.

LePlay, in *Semaine Medicale*, Paris, says: "The researches outlined here enlarge the conceptions of the pathogenic importance of intestinal poisons. Many of the experiences described were merely the production in animals of what is observed in the clinic. An entire series of deformities were engendered in very young animals. One phenomenon noted was that of autofunction, that is, that a substance derived from a given organ stimulates that organ to extra activity. Urine, for instance, has a diuretic action; thyroid extract stimulates the thyroid gland, an injection of substances derived from the wall of the ileum caused manifest hyperemia of the intestinal wall, exaggerated secretion and nuclear karyolysis. The experiments reported demonstrate poisons, including toxic substances, such as the diastases, which are required for the nutritive processes. They have further established that frequently a disease is due to the disorganization of its defenses rather than to the intrusion of any special pathologic agent. In therapeutics, while it is necessary to attack the enemy, yet in many cases it is important that more attention should be paid to strengthening the ramparts. The normal organic products may become morbid under certain circumstances, and some of these morbid elements are merely physiologic digestive secretions.—"*Jour. A. M. A.*

The Abuse of Water Drinking in Disease.

Manges, in *N. Y. Med. Jour.*, Jan 21, 1905, says: "In chronic gastritis and intestinal disorders the significance of this abuse can be more readily recognized; but nevertheless, the warnings are unheeded. Many a patient bears within him the indelible records of what Salisbury and Banting regimes can do. So, too, have marks been left by the milk diets which have been imposed upon feeble women and men, the splashings of whose large atonic stomachs have fallen upon deaf ears. Their physicians pay just as little heed to the significance of the small amounts of urine secreted by patients with dilated stomachs, or to the importance of Von Mering's researches with dilated stomachs, or to the importance of Von Mering's re-

searches that water may even be excreted into the stomach. Of what significance is the fact which they all learned at the medical school that the stomach practically absorbs but little water, provided they can induce these patients to drink freely? Water out of sight is out of such physicians' minds.

As regards the effects of large quantities of water in metabolic disorders, the abuse of water drinking will last till patients and their doctors worship at other shrines than that of their mystic Baal, uric acid. I have already given the views of Hoffman upon the effect of water drinking on the metabolism. I shall also give those of the distinguished Berlin physiologist, Rubner, who says: "Formerly a distinct influence upon the metabolism was attributed to water drinking, and it was supposed that the splitting up of albumins was decidedly increased by it. This, however, is incorrect. Copious water drinking may for a short time cause a washing out of nitrogenous products from the body; but water has no effect upon the splitting up of the albumins and upon the general metabolism."

Furthermore, as regards the excretion of uric acid, Minkowski has shown that the older researches are valueless, since the uric acid tests fail to react when the urine is too dilute. He also quotes the researches of Schoendorff, who concludes that water drinking has very little practical effect upon the uric acid excretion; and also those of Laquer, Zagare, and Pace, who found that water drinking was followed by a slight increase of uric acid excretion, but this was much less than the increase in the excretion of urea.

Minkowski's directions represent the latest views upon the regulation of water drinking in these conditions; he advises that it be so regulated as to increase the total daily amount of urine a little above the normal, i. e., to about one and one-half to two litres. In general, two to three litres daily may be regarded as a sufficient quantity for the total fluids for this purpose. My own belief is that three litres is too high an allowance if, as is often true in these cases, there is the slightest suspicion concerning the condition of the heart or blood vessels. The rational use of smaller quantities or the employment of alkaline and saline mineral waters of the Vichy or Homburg or even Wiesbaden types will meet this indication.

Treatment of Pneumonia in Adults.

M. Manges (*Medical Record*, December 10, 1904,) says that the tendency is to forget that this is a general disease in which there

may be great disparity between the local signs and the patient's general condition, severe cases sometimes giving evidence of but a slight lung involvement, and vice versa. So far, the attempts to devise specific treatment have not been successful, and but little is to be expected in this direction, for the pneumococcus is not always a constant quantity, and various other organisms, including the influenza bacillus, which, of late, has markedly influenced the disease, may be present in mixed infections. The author's detailed discussion of the treatment is subdivided under the following heads:

1. To Maintain Life. The careful management of the stomach by a suitable diet to prevent distention and the subsequent cardiac embarrassment is of the highest importance. It is wiser to give too little food than too much and to avoid all carbonated beverages.

2. To Support the Heart. The best drugs for this purpose are strychnine, caffeine, alcohol, camphor, and ergot. If prompt results are not obtained all the drugs should be given hypodermatically and in sufficient amounts to exert their physiological action. Views as to the value of large doses of digitalis are still divided. Adrenalin, the precordial ice-bag, cupping and venesection are also useful measures.

3. To Control Hyperpyrexia. Large, flat ice-bags on the chest will be found useful, but care is necessary to avoid producing intercostal neuritis. Cold sponging and packs are of value, but must be used with caution, and cold baths are contraindicated. The rational use of car-tar antipyretics in small doses may contribute much to the patient's comfort.

4. To Relieve Suffering. The cough and pain are combated by the use of small doses of morphine hypodermatically, or of heroin hydrochlorate. The Paquelin cautery is of great value for the pleuritic stitches. Oxygen is probably of less value than is generally supposed. Every effort should be made to secure as much sleep for the patient as possible.

5. To Control Complications. Pleurisy with effusion, empyema, pericarditis, endocarditis, etc., require the treatment ordinarily pursued.—*Lancet Clinic*.

DEPARTMENT OF MATERIA MEDICA, THERAPEUTICS AND PEDIATRICS

In Charge of Budd Van Sweringen, M. D.

Professor of Theory and Practice of Medicine and Clinical Medicine in the Fort
Wayne College of Medicine.

Fresh Cold Air Treatment of Pneumonia in Infants.

W. P. Northrup reports two cases of pneumonia in infants, in which the windows of the sick room were kept open day and night; both children recovered. He believes it will become more and more the rule to treat pneumonia in this way. Cool, pure air, he says, reddens the blood, stimulates the heart, improves digestion, quiets restlessness, and aids in overcoming toxemia. He concludes with the following prescription for killing a baby with pneumonia: Crib in far corner of room with canopy over it. Steam kettle; gas stove (leaky tubing); room at 80° F. Many gas jets burning. Friend in the room, also the pug dog. Chest tightly enveloped in waistcoat poultice. If the child's temperature is 105° F., make a poultice thick, hot and tight. Blanket the windows, shut the doors. If these do not do it, give coaltar antipyretics and wait.—*Abste Am. Med.*

Cerebrospinal Meningitis Treated by Intraspinal Injections of Lysol.

Manges (quoted in the *Therapeutic Review*, August, 1904) reports three cases of cerebrospinal meningitis, all of which recovered after intraspinal injections of lysol. This treatment was first introduced by Seager, who reported 31 cases of the epidemic type of the disease with 18 recoveries. His technique consists in making a lumbar puncture and aspirating varying quantities (frequently amounting to 50 cubic centimeters) of cerebrospinal fluid. Normal salt solution is then injected with the same syringe, the needle being *in situ*, and the surrounding parts are washed with the salt solution. Lastly, from 9 to 12 cubic centimeters of a one per cent solution of lysol is injected and the needle withdrawn. The temperature falls immediately, but rises again after one to three days. The puncture and injections are repeated after each temperature elevation until only clear and limpid fluid is withdrawn. Afterward a few punctures are made to see if the fluid remains clear.

Of the three cases treated by Manges by this method, one was a

meningococcic infection, and two streptococcic. The first patient was failing rapidly and there was every reason to suppose that the case would end fatally. As all cases of cerebrospinal meningitis due to streptococci formerly seen by the author had ended fatally, there was no reason to suppose that these cases would recover.

The technique practiced by Manges differs slightly from that of Seager, in that he omits the flushing of the spinal canal with normal salt solution.

Ordinarily the treatment is not painful, and general anesthesia is not required. The quantity injected at one treatment varies from 3 to 9 cubic centimeters for adults. The injections should be repeated daily until the spinal fluid is no longer turbid.—*Therapeutic Gazette.*

Borated Food and Nephritis.

Harrington says that the two most commonly employed chemical preservatives of food are borax and boric acid. They are used so extensively that persons of all ages are likely to receive frequent, if not daily, doses of one or of the other or of both. They are added to milk, butter, oleomargarin, some forms of cheese; they are almost always present in opened clams and oysters; they are applied externally to fresh meats to prevent sliminess and to freshen salted fish. They are important constituents of the brine in which meats are pickled and corned. Their solutions are injected into ham and other pork products, and they are found in almost every known make of sausages, to prevent the sausage contents from contracting and thus causing the casing to appear loose and wrinkled. Moreover, they preserve the natural color. Once established in the tissues borax can not be soaked out, not even boiled out. The author points out that many cases of slight kidney disturbance may be due to the continued ingestion of the boron compound. Experiments have been performed from time to time with a view to establishing the relationship between these two preservatives and kidney lesions. Unfortunately, most of these experiments extended over too short a period of time to lend any weight to the results obtained. Harrington submits the details and results of a feeding experiment which he conducted for a period of 19 weeks. Twelve healthy male cats were selected and kept under precisely the same conditions in separate cages. All were fed on the same food with this difference: One received no preservative; six received borax

from 48 to 112 grams. in daily doses extending over a period of from 56 to 133 days. The average minimum dose was .544, the average maximum dose .857; the remaining five cats received another preservative which proved to be innocuous. Of the dozen animals under observation but three showed any sign of illness and they were of the borax group. One died at the end of the sixth week; the other two were sick occasionally, but during the last weeks of the experiment appeared to be normally active. Each cat was weighed at the end of each week; all showed occasional losses, but with the exception of the one that died there was a net gain ranging from 230 to 990 grams. When the animals were killed a careful autopsy was made and all the tissues were examined microscopically. The control animal showed no lesions whatever. The animals that were fed on borated food all showed kidney lesions and changes in the liver. The five cats that were given another preservative showed no marked changes in the kidneys or elsewhere. The kidney lesions of the cats fed on borated food were of the same general character, but differing in intensity. They consisted in degeneration of the tubular epithelium, most marked in the convoluted tubes. The normal fat vacuolation was greatly increased and there was focal swelling and disintegration of epithelial cells, with fragmentation of nuclei. The lumen of many of the collecting tubes contained irregular granular masses representing cell fragments. Some tubules were completely stripped of epithelium. In one kidney the change was confined entirely to degeneration of an intense character, with hyaline casts in the small tubes. In other cases the degeneration was not so intense, but was accompanied by foci of cellular infiltration, most marked on the cortex, and also around single glomeruli. Where this was most intense the tubules were entirely destroyed. The lesions were analogous to those found in subacute and chronic nephritis in man, although they do not conform to any type.—*Jour. A. M. A.*, Sept. 17, 1904.

DEPARTMENT OF SURGERY GYNAECOLOGY *and* OBSTETRICS

In Charge of Miles F. Porter, A. M., M. D.
Professor of Surgery and Gynæcology in the Fort Wayne College of Medicine,

Puerperal Tetanus, Recovery.

John F. Roderer, M. D., reports a case of puerperal tetanus (*American Medicine*, March 4, 1905,) with recovery. The treatment consisted in hypodermic injections of morphine, bromides and chloral by the mouth, ice bags to the head and cold baths for the fever, and tetanus antitoxin subcutaneously. The recovery is attributed chiefly to the antitoxin of which 660 cc. or 132,000,000 immunizing units were given all told within a period of nine days. 600 grains of chloral and seven hypodermic injections of morphine ($\frac{1}{4}$ gr.) were given. The source of infection could not be traced though it was supposed to come from napkins which had been exposed in drying to the dust from the street. The attack came on eleven days after confinement, up to which time her recovery had been uneventful.

Infection from the Mouth.

Mendiz de Leon (abstract in *Am. Jour. Med. Sci.*, Jan., 1905,) calls attention to the danger of infecting wounds from the mouth of the operator or assistants by talking over them during operations, and recommends that clinical teachers wash their mouths with an antiseptic before commencing their clinics and that they also wear mouth-masks.

Cure of Intussusception by Sloughing.

In the *Archives of Pediatrics*, July, 1904, T. W. Snow reports a case in which the invaginated gut became gangrenous and protruded through the anus. The mass was ligated and removed and the child, which was under a year old, made a perfect recovery. But four other cases of this kind are reported in children so young.

Gonorrhoeal Salpingitis in Young Children.

In the *British Journal of Children's Diseases* for Oct. 1904, are reported two cases of gonorrhoeal salpingitis occurring in children. One by Bidwell in a girl of six years which recovered after abdom-

nial salpingectomy and curettage, and one by Carpenter in a child of three and one-half years which recovered spontaneously. Carpenter thinks that sterility in after-life not infrequently results from infections of infancy and that some of the cases of pelvic trouble in the recently married hitherto accredited to the husband may be accounted for in the same way. These inflammations are apt to recommence at puberty.

Perilous Calms in Appendicitis.

A paper with the above title, by Robert Wallace Harden, of Chicago, (*Boston Med. and Surg. Journal*, Feb. 16, 1905,) is concluded as follows:

1. Defervescence of symptoms and apparent better condition of a patient do not always mean recovery, but may be the forerunner of a more dangerous condition.

2. There being no specific for the disease, no matter what treatment is used, the one who procrastinates should shoulder the responsibility for the death.

3. When a clear diagnosis is made but one treatment should be advised, that of operation as soon as possible under the conditions, or the golden opportunity may be forever gone.

4. The physician who does not explain the great dangers of delay and the small comparative danger of operation is doing his patient a serious injustice, which often leads to fatal results.

5. Operation at the proper time usually greatly shortens convalescence and eliminates all danger from this cause hereafter.

6. Procrastination is the greatest cause of surgical deaths, operation often being performed as a last resort, when but little hope of recovery exists.

(The last conclusion applies with equal force to most, if not all, surgical maladies.—ED.)



BOOK REVIEWS

Pharmacology of the Fluid Extracts in Common Use.—By Dr. John S. Wright.

This little book issued by the well known firm of Eli Lilly & Company, of Indianapolis, is primarily an address to students in medical colleges, and pays very little attention to the therapeutic use of drugs, the object of the writer being to give the student a concise account of the latest and most authoritative statements concerning the origin, active principles, and physiological effects of the drugs commonly administered as fluid extracts, leaving therapeutic teachings to the lecturer on that subject. Where drugs have not been investigated thoroughly their empirical uses are indicated; otherwise the treatment of various subjects is restricted as mentioned. The book will be found of interest and value to every physician, and its arrangement of topics and index makes it a book or ready reference. It is issued in leather binding only at the price of 50 cents per copy, postpaid, by the Eli Lilly & Company, of Indianapolis.

Studies in the Psychology of Sex.—By Havelock Ellis. F. A. Davis Company, Publishers Philadelphia. 1905.

This volume is one of five along the same line, each complete in itself. The present book deals with the subject of sexual selection in man. It is entertainingly written, while being thoroughly scientific. The influence of the special senses in pairing is well drawn and the book should be appreciated by anyone who is interested in these questions.

B. VAN S.

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No. 5

EDITORIALS

Four Trials to Secure Warranted and Reasonable Fee for Professional Services Rendered.

Dr. C. B. Stemen, of Fort Wayne, has for the third time been given judgment of approximately \$300 and costs for services rendered in operating and subsequently caring for a patient suffering from purulent appendicitis. The defendant, who is amply able to pay for any and all professional services, seems to take vicious delight in appealing for and securing a new trial on the ground that the judgment is excessive. We are advised that owing to a technicality there is to be a fourth trial to determine the justice of the judgment. As a matter of fact the service rendered was worthy of a fee double or treble the amount of the judgment rendered in each of the three suits, and the defendant should have been willing to pay any one of the three judgments, which in each instance was considerably less

than the fee originally charged by the surgeon. The remarkable feature of the case is that in an instance where liability has been clearly proven and according to the judgment of unbiased witnesses and impartial juries the physician deserves compensation as indicated, the Court should have found occasion for the granting of four trials. There is surely an injustice in law which will permit of any such extensive and entirely unnecessary litigation to force settlement of a claim that is not only reasonable but has been repeatedly approved by witnesses and juries. If an attorney acting as receiver for property valued at \$2,000 puts in a claim for \$500 for services rendered, the Court promptly allows the claim and no questions are asked, but if a reputable physician of recognized ability attempts by process of law to collect a fee of \$500 from a wealthy patient for professional services rendered in operating and caring for such patient for a prolonged length of time, and through such service succeeds in saving the patient's life when seriously endangered, the Court looks upon the matter in an entirely different light. Some unfortunate man whose entire property is tied up in a receivership can be bled for exorbitant attorney fees and the Court approves, but the wealthy though unappreciative citizen who receives much more valuable and skillful services from a surgeon is upheld by the Court in his efforts to avoid payment of reasonable and just compensation. Truly the opinion of some Courts as to what constitutes justice and fairness is badly warped.

A. E. B., JR.

Legislation and Education.

A stream can flow no higher than its source. The source of legislation in this country is the people. Laws may be enacted without the consent of the majority but without their consent they can not be effectively enforced. What the majority of the people earnestly want in the way of legislation, they get.

To attempt to pass a law the aim and effect of which is not understood by the bulk of the people is, to use a base ball phrase, to "fan the air." Such attempts may result in the passage of the bill but the resulting law can never be made effective without the cooperation of the masses. All of which means that efforts at progress through legislation to be effective should commence with education of the public. Many of the failures along this line in the past have been due to failure on the part of those originating these movements to appreciate this principle. All true reforms are in the interest of

the majority of the people and it follows therefore that failure of attempts to secure such reforms is due to ignorance. Every local medical society should have a committee through which the society might reach the laity via the public press in the discussion of any and all medical subjects of public importance. Modesty (not altogether excusable perhaps) prevents the best doctors from writing personal communications of this kind very often. And when this modesty is thrown aside and a personal communication written it does not carry the weight it should because of the suspicion entertained by many of the readers that the writer is actuated by selfish motives.

Such a committee might be named "The Committee on Public Medical Education" whose duty it should be to address the public through the lay press at such times and on such topics as the society directs.

M. F. P.

Immigration.

"The report of the bureau of immigration for the period of the last six months is not a pleasing one to the people of the United States. It is not that the report shows an increase of about 40 per cent. over the six months previous, but the cause for uneasiness and alarm lies in the character of these immigrants. The great bulk of them were ignorant Russians, Italians and representatives of other objectionable races. Russian emigration to the United States during the last year increased 80 per cent. and is still increasing. The assimilation of this putrid mass is taxing our social digestive apparatus to a dangerous degree. It is time for congress to call the halt that should have been called years ago."—*Fort Wayne News, March 28, 1905.*

How long can we maintain our present rank among civilized and enlightened nations if this stream of foreign infection is allowed to continue to flow in upon us unchecked? To what is the apparent unconcern in this matter due? Here is an important political work for the performance of which the medical profession is peculiarly fitted.

M. F. P.

ORIGINAL ARTICLES

No paper published or to be published elsewhere as original
will be accepted in this department.

**Medical Expert Evidence: Is a Radical Change in the Present System Advisable.*

BY
JOHN MORRIS, JR.,
Of the Indiana Bar.

It is a well established principle, both in England and in this country, that the opinions of persons specially skilled in medicine and surgery are admissible in evidence, upon a question pertaining to their art or science involved in a judicial proceeding. The principle is founded upon necessity, for the studies, pursuits and experience of judges and juries are not usually such as to make them familiar with this particular department of knowledge. "A learned and practiced chemist can tell," says Mr. William L. Foster in an article on *Expert Testimony* in the Harvard Law Review for November, 1897, "(but I cannot, nor can any juror) whether the stains upon a garment are of blood or rust; and if of blood, whether it be the blood of man or beast; and yet upon the true answer to such an inquiry a human life may depend. So the question whether a death has been caused by poison can ordinarily be determined only by an experienced toxicologist. Indeed, the field of judicial investigation requiring the assistance of experts is illimitable. The anatomy of the human frame, the diseases of the human body, the derangement of the functions of the human brain,—in some form or other these are matters of daily investigation in the courts, and concerning all these things the average juror, lawyer, and judge is so profoundly ignorant that the search for truth, unaided by the knowledge and judgment of scientific and medical experts, would be utterly hopeless."

The practice of receiving such evidence was a feature of the Roman law, and has prevailed in many of the continental systems founded thereon. In England, at a very early period—in fact, as soon as the right of jurors to determine controversies from their own knowledge became obsolete and the practice of producing evidence in open court began to prevail—opinion evidence, especially of medical witnesses began to be received.

*Address delivered before the Fort Wayne Medical Society, March 28th, 1905.

From this early period, the employment of opinion evidence in the judicial system of England, as well as in the judicial systems of this country that are of English origin, has continued to the present day, increasing with the progress of science and the advancement of civilization, but without practical change in the method by which it is received in our courts. It has been well and truthfully said that "the scientific expert is a product of an advanced and rapidly advancing civilization; that he has acquired an immensely increased importance, and a much wider field, and a far greater frequency of employment by the recent marvelous advances in the applications of science—applications which have increased the sphere of things to be litigated about."

The value and necessity of medical expert testimony have been recognized, not only by the fact that, in all proper cases, it is universally received by our courts in all jurisdictions, but by frequent expressions of courts in their decisions.

In a case before the Supreme Court of North Carolina, the court say that "The opinion of a well instructed and experienced medical man, in a matter within the scope of his profession and based on personal observation and knowledge, is, and ought to be, carefully considered and weighed by the jury in rendering their verdict."

"The opinions of medical men," say the Supreme Court of Texas, "are received with great respect and consideration, and properly so."

"It is well settled," say the Supreme Court of Pennsylvania, "that the knowledge and experience of medical experts is of great value in questions of insanity."

The Supreme Court of Mississippi, in a case before it, use the following language: "Prominent among the testimony necessarily made use of at this stage of the investigation, is that of medical and scientific persons—surgeons, physicians, and chemists—by whom the body or its remains have been inspected and examined, either at the time of the discovery or shortly after. The testimony of these witnesses, as to the appearances observed on such examinations, is always of the greatest value, and their opinions as to the causes of such appearances are entitled to much consideration."

These quotations are sufficient to illustrate the views expressed by many of our highest courts in their judicial decisions.

Notwithstanding the fact, however, that the value, importance, and necessity of medical expert testimony has been thus recognized—I might say established—not only by the expressions of these eminent and distinguished courts, but by the fact that the employment

of it in our judicial system began at a remote period and has continued and constantly increased until the present time, this class of testimony, and especially the method of admitting it in the trial of cases, as well as the expert himself, have been subjects of such frequent and severe criticism and of such sweeping condemnation on the part of certain judges and writers on jurisprudence, as to create in the public mind a distrust of all medical expert testimony and to impair, if not destroy, its legitimate value and usefulness in admittedly proper cases. A few quotations will be sufficient to illustrate the nature of these criticisms. You are probably familiar with the remark attributed to a certain lawyer, in his closing address to the jury, to the effect that "there are three kinds of liars—the common liar, the d——d liar, and the scientific expert."

Mr. Justice Davis, while on the Supreme Court of the United States, in one of his written opinions, used the following language: "I do not say this to discredit the verdict of juries. I think they are far more reliable than experts on the subject of insanity. If there is any kind of testimony that is not only of no value, but even worse than that, it is, in my judgment, that of medical experts. They may be able to state the diagnosis of the disease more learnedly, but upon the question, whether it had, at a given time, reached such a stage that the subject of it was capable of making a contract, or irresponsible for his acts, the opinion of his neighbors, if men of good common sense, would be worth more than that of all the experts in the country."

A leading authority on the law of evidence in this country, thus speaks of medical expert testimony: "Unfortunately for the regrets here expressed, in regard to the absence of medical experts, who could place all doubts and uncertainties upon this perplexing subject in such a light as to remove all difficulty, experience has shown, both here and in England, that they differ quite as widely in their inferences and opinions as do the other witnesses. That has become so uniform a result with medical experts, of late, that they are beginning to be regarded in much the same light as hired advocates, and their testimony as nothing more than a studied argument in favor of the the side for which they have been called. So uniformly has this proven true, in our limited experience, that it would excite scarcely less surprise to find an *expert*, called by one side, testifying in any particular in favor of the other side, than to find the counsel upon either side arguing against their clients, and in favor of their antagonists."

Mr. Justice Miller, when on the Federal Circuit Bench, after stating that he, himself, had no confidence in the impression produced by any number of *ex parte* affidavits of experts, said: "My own experience, both in the local courts and in the Supreme Court of the United States, is, that whenever the matter in contest involves an immense sum in value, and when the question turns mainly upon opinions of experts, there is no difficulty in introducing any amount of them on either side."

"It must be painfully evident to every practitioner," say the Supreme Court of California, "that these witnesses are generally but adroit advocates of the theory upon which the party calling them relies, rather than impartial experts, upon whose superior judgment and learning the jury can safely rely."

In an article in the *American Law Review* for November, 1898, Mr. G. A. Endlich says that "it is patent to every one who chooses to inform himself, that expert testimony, as now received in our courts; is looked upon by the public as an unmitigated farce and a nuisance."

Another writer declares that the "prevalent method" is "universally condemned by judges, law-writers, experts themselves, and the jury."

In a paper read before the New York State Medical Association, in October, 1899, Mr. Willard Bartlett, Justice of the Appellate Division of the Supreme Court of New York, says that "The partisan character of expert testimony becomes unmistakable, when the medical man participates in a trial not only as a witness giving opinion evidence, but also as an adviser to counsel trying the case;" and that, "The discredit into which expert evidence has fallen is mainly due to the prevailing impression that experts almost invariably testify in the interest of the party by whom they are called and paid."

It would be deplorable indeed, as Judge Foster has said, if such criticisms were justified by the facts. He gave it as his belief, however, "resulting," he said, "from the observation and experience of many years, that there are few instances in which a scientific witness permits himself to testify or to be engaged on a side contrary to his convictions derived from a careful examination of the case." This is my own belief, and the belief, in my opinion, of the great majority of lawyers who do the practical work in the trial of cases.

Among the evils and abuses said to result from the practice of admitting expert evidence are: The lack of satisfactory stand-

ards of expertness with the result of inviting the testimony of quacks and charlatans; the partisan and conflicting and, hence, unreliable character of the evidence given by expert witnesses, which is claimed to be occasioned, to a great extent, by the fact that they are employed and paid by one party or the other to the action; the confusing effect on the jury of the hypothetical method of questioning such witnesses, and the prolongation of trials and the consequent waste of time and increase of expense on account of the number of such witnesses called.

No one, so far as I am aware, has ever ventured to propose, on account of these evils, that we should do away with expert testimony entirely and abolish the practice of receiving in it the trial of cases. Notwithstanding the character of the language used in the criticism of expert testimony, it seems to be conceded by most of the critics that all the evils pointed out have resulted, not from expert testimony in and of itself, but from the system or method which has always prevailed of producing and eliciting such testimony in the trial of cases.

In the last year or two, the interest in the subject of procuring some reform in the method of receiving medical, as well as other kinds of expert testimony, has noticeably decreased, but, for a period of ten or fifteen or, perhaps, twenty years, prior to that time, there seems to have been a constantly growing interest in the subject, due, in my opinion, partly to the increase in the number of law magazines and text-books published, and more to the fact that associations of lawyers began to be regularly established in nearly every state and to hold annual meetings which were more largely attended each year. The subject of expert testimony naturally received its proper share of attention from the class of lawyers and professors of law whose time and tastes qualified them for reading papers at meetings of these associations and influencing, if not controlling, their actions. The result was, that the subject was discussed and discussed, not only by these men, but by writers for law books and magazines, and the discussion, on the part of most writers, assumed such a tone of faultfinding and disparagement of the prevailing system that it became, in my opinion, largely responsible for the odium which, even today, attaches, not only to expert testimony, but to the expert witness, and especially the medical expert.

To remedy the evils that were pointed out as existing, various reforms were suggested. It would be impossible, even cursorially,

to give a statement of all the plans for reform that have been proposed. Some of them are so novel and impractical that they deserve and have received only the attention that curiosity attracts. For example, Professor John Ordronoux proposed to "Remove all experts from the field of testimony, and place them in that of arbitration." "Whenever a scientific question arises," he says, "whose solution is material, let a *feigned issue* be made upon the points and referred for judgment, upon evidence agreed upon, to three experts, one to be selected by each party litigant and the third by the Court, such experts to sit and determine at once the questions in dispute, and their opinion to be received by the jury as conclusive of the issue tried by them.

Another writer, after combating this proposition and truthfully remarking that "a feigned issue in a trial for murder would strike many as singular," proposes a plan not less unique and impracticable. "Why not," says he, "authorize the court to associate with itself an expert who, jointly with the judge, would preside at the trial, direct and control the examination of witnesses, and sum up at the close before the summing up by the law judge. After his summing up, and before the jury are charged by the court, there would be an opportunity of questioning him fully with respect to all points not previously developed in the course of the trial.

It is enough to say of such a proposition that it simply would not be tolerated. In the same case, there might be several scientific questions requiring as many experts to sit with the judge, which would lead necessarily to the utmost confusion of the jury and destroy all regularity in the procedure of the trial.

It has also been suggested that, in certain cases, a certain number of medical experts shall sit upon the jury and hear the evidence as ordinary jurors. But how would such jurors be selected and paid; and what assurance would there be that they would be more likely to agree in the jury box than upon the witness stand?

The remedies which have been most frequently urged and most strongly supported, so far as medical expert testimony is concerned, have been thus summarized by Judge Bartlett:

1. "The appointment of a commission of experts in insanity cases to examine the person alleged to be insane, before the trial, and make a report to be read at the trial, where all the members of the commission must attend to be examined or cross-examined, as either party may desire.

- "2. The appointment of a like commission in any case involv-

ing a question of medical expert evidence to report to the court and testify at the instance of either party, without any compensation except a fee to be fixed and paid by the State.

"3. The regulation of all matters calling for expert testimony to a commission of experts, who shall transmit their determination to the trial court, which must accept it as a fact conclusively established in the case.

"4. The appointment of expert witnesses who must qualify themselves to give opinion evidence in the case without consultation with the litigants or their counsel, and who shall be compensated for their services out of the county treasury of the county in which the trial takes place."

It has also been proposed that the hypothetical method of interrogation should be abolished and that there should be a statutory prohibition against receiving expert evidence from any witness who has been paid or expects to be paid anything by either party except the regular witness fees allowed by law for his attendance in court.

In New York, Massachusetts, Illinois, Pennsylvania, and, perhaps, several other states, attempts have been made, through the legislature, to carry into effect one or another of these plans of reform. Bills for this purpose, approved by the State Bar Associations and by local medical societies, have been introduced in the legislatures of these states. So far as I am aware, no one of them has become a law. In my opinion, none of them will and none of them should become laws.

The very fact that the existing system has so long prevailed in this country, that it is the necessary outgrowth of our free institutions and of those constitutional guarantees securing to every person a fair and impartial trial, and the fact that every attempt to carry into effect the pretended reforms assumed to be necessary in our procedure relating to the use of expert testimony, convinces me that these so called reforms not only are not demanded, but that they will not be met with favor or toleration by the people or by the practicing lawyer. They are subversive of some of our most cherished constitutional rights; they involve the importation into our judicial system of continental methods entirely at variance with and antagonistic to that spirit of individual liberty and security in which that system has been developed; and they are not, in my opinion, sustained or justified by reason or necessity.

It will be observed that all of these schemes practically involve the establishment of a body of official witnesses. The idea is de-

rived from the practice which prevails in France and Germany, whose judicial systems are so different from ours that it will always be found difficult, if not impossible, to engraft a feature of those systems upon our own without impairing or destroying its character.

In the first place such schemes could have no practical effect without constitutional amendments involving changes so radical as to be antagonistic to our judicial institutions. Such amendments could not and should not be obtained. The fundamental and constitutional right of every litigant to summon such witnesses in his own behalf as he sees fit, is too sacred and important ever to be yielded for any cause whatever; and, in this matter, there would be nothing to be gained by it. How would any of the evils supposed to result from the present system be remedied by having the medical experts selected by the judge? What standard of qualification would the judge adopt in making his selections? What capacity would he have and what motives would actuate him in making his selections? "A man may be a very good judge," says Judge Bartlett, "and yet be a very poor judge of doctors." "I should be very sorry," he adds, "to have to be treated by the physicians of several judges whom I have known in past years, and yet I am certain that in each case his physician would have been the first either of these judges would select for any official medico-legal preferment within his power to bestow."

The other experts to be selected it is very likely the judge would choose either from political reasons, or from solicitations and recommendations of the friends of some favorite doctor. At least it is fair to assume that the witnesses chosen, for various reasons, would generally be men of only average ability. But, as has been well said by Dr. Henry Smith Williams, "mere average medical knowledge does not supply proper qualifications for expert testimony in all kinds of cases; as, for example, in cases involving chemical and microscopical examinations, or inquiries concerning mental conditions—cases demanding the use and application of quite different kinds of technical knowledge. A physician may have the best professional training and the highest standing in his profession, and yet be utterly incapable of making a thorough microscopical or chemical examination, or of forming a really competent judgment as to the mental condition of an obscure case of alleged insanity. Clearly, then, a man should not be permitted to qualify as an expert simply because he has good professional standing as a physician."

Sir James Fitzjames Stephen, in his History of the Criminal Law of England, shows the incongruity of introducing official experts into the common law system of administering justice, like those proposed in the schemes above mentioned, and declares that he has the strongest possible opinion in favor of the maintenance of the present system. "Our present system," he says, "provides a definite place and definite rights and duties for the parties, the judge, the jury, and the witnesses. What room there is for any other person in the proceedings I do not see. It is impossible to say what an expert is to be if he is not to be a witness like other witnesses. If he is to decide upon medical or other scientific questions connected with the case so as to bind either the judge or the jury, the inevitable result is a divided responsibility which would destroy the whole value of the trial. If the expert is to tell the jury what is the law—say about madness—he supersedes the judge. If he is to decide whether, in fact, the prisoner is mad, he supersedes the jury. If he is only to advise the court, is he or is he not to do so publicly and to be liable to cross-examination? If yes, he is a witness like any other. If no, he will be placed in a position opposed to all principle. The judge and the jury alike are and ought to be instructed only by witnesses publicly testifying in open court on oath. It never would be and never ought to be endured for a moment that a judge should have irresponsible advisers protected against cross-examination."

As constitutional obstacles, which, in my opinion, cannot and ought not to be removed, prevent legislation which will confine litigants to officially selected experts, it is apparent, to say the least, that the plan of having them selected by the judge would be of no practical value.

One of the reasons suggested why some change in the present system is needed is because trials are often prolonged by the number of expert witnesses called and the time of the court consumed in cross-examinations to test the skill or knowledge of such witnesses and the correctness of their opinions. But this criticism, I conceive, is wholly without merit. Under the present system, the court has ample power to limit the number of witnesses and the *range* of the testimony, and confine the examinations and cross-examinations within reasonable limits.

It has also been charged that, under the present system, there is no satisfactory standard for determining the qualifications of medical experts. If this were true, what remedy for this evil

do the schemes above mentioned afford? All of them necessarily lack the requirement of any particular qualification of professional learning and ability on the part of the experts to be selected by the court. The discretion of the judge, as to the qualification of the experts to be selected by him could not be controlled, and, under the proposed schemes, if he erred in his selection, there would be no way of correcting the error.

The charge made, however, is entirely without foundation. As stated at the beginning of this paper, it is only physicians and surgeons of practice and experience who are regarded as experts. They are permitted to express opinions only upon questions strictly embraced within their profession and practice. A specialist, who has devoted his attention to diseases of the eye and ear, would not be permitted to testify as to mental diseases. To quote again the language of Dr. Williams: "A physician may have the best professional training and the highest standing in his profession, and yet be utterly incapable of making a thorough microscopical or chemical examination, or of forming a really competent judgment as to the mental condition of an obscure case of alleged insanity. Clearly then a man should not be permitted to qualify as an expert simply because he has good professional standing as a physician." "And," says Judge Foster, "An American judge, unless greatly deceived, will not permit a clearly incompetent person thus to qualify."

Under the present system, before a person holding himself out as a physician can testify as an expert, he must prove in open court, to the satisfaction of the judge, that his training and experience qualify him to express an opinion upon the questions involved; and as to his qualifications, he is subject to cross-examination. More than this, he is liable to be called upon, on cross-examination, to sustain his opinions by valid and sufficient reasons—his ability or lack of ability to do which the jury may rightfully consider in determining the value of his opinions. In other words, the expert must not only show that his opportunities have been such that he *ought* to be able to form a correct opinion, but he must demonstrate that his ability is sufficient actually to *enable* him to do so. Under the proposed schemes of having medical experts selected by the court, it is apparent that no opportunity is thus afforded to test their ability, learning and experience.

Another charge against the present system which has been the occasion for frequent outbursts of intemperate and extravagant

statements on the part of many writers and judges, is the alleged conflicting, and, hence, unreliable character of the evidence produced by medical experts. Concerning this charge, I agree with Judge Foster, that "it seems hardly becoming for the *legal* profession to indulge in severe criticism, since there is no profession so strongly characterized by differences of opinion on every subject—lawyers as well as judges constantly disagreeing, and the latter not infrequently over-ruling one another's decisions—unless it be the clerical profession, the members of which, it may have been observed, are not entirely unanimous in their interpretations of the Holy Scriptures." We are all aware that, in the most important cases that have come before the Supreme Court of the United States, admittedly the ablest and most distinguished judicial tribunal in the world, there have been several conflicting opinions, no one of which could be reconciled with the others. And yet he would be a bold person, indeed, who would suggest that, for this reason, there should be some change in the form or makeup of that court.

It has been my experience, and the experience of many able lawyers with whom I have conversed, that, as a rule, in the trial of cases, medical experts, upon the same state of facts, express the same opinion when the question is one about which there is a generally accepted opinion in the profession. When a question arises about which there is no such generally settled opinion in the profession, which is undergoing investigation and experimentation and tests, there unquestionably are and it is natural that there should be differences of opinion among physicians and surgeons. It would be strange and unfortunate if such was not the case. "If there were no disagreement," says Judge Foster, "investigation and experiment would cease; and science, literature and art would sink to a dead level of stupidity and laziness. If scholars and learned men had come to a condition of unanimous agreement a hundred years ago, we should have had none of the marvelous discoveries and inventions—none of the magnificent victories and triumphs in medicine and surgery—that have distinguished and illumined the closing years of the nineteenth century."

If members of the medical profession differ among themselves in their opinion upon a certain question, is it not best that the jury should know the fact in order that they may reject, as they should and are likely to do, all that is mere speculation and unestablished theory? This is certainly as well as that the judge should select witnesses who cannot agree, and much better than that he should

select witnesses because they entertain the same, and, perhaps, the wrong opinion.

The most frequent complaint, however, and the greatest outcry against the present system is that, under this system, as it is claimed, the medical expert becomes the hired advocate of the litigant in whose behalf he testifies; that he is employed and paid by one of the parties to the action and, on this account, consciously or unconsciously, becomes a partisan whose opinions are moulded to promote the interests of the party in whose behalf he is called to testify. Pages could be filled with quotations from the law books criticising in the severest and most extravagant language—and often in terms indicating dishonesty and corruption—the medical expert who has accepted compensation for his services from one of the litigants. Are these criticisms just, and is the practice complained of a serious evil?

There was a time in the history of the law, when the parties to an action, and all persons having a direct interest in the result of the trial, were not permitted to testify, because it was assumed that their interest in the controversy would prevent them from telling the truth except when it was to their advantage to do so. With the advancement of civilization, a demand arose that trials should be simplified in procedure and be confined to a fair and impartial investigation of the controversy between the parties. As one of the natural results of this progressive spirit, there came finally to be a general conviction that the rule excluding witnesses on account of interest in the cause worked injuriously and, between 1850 and 1860, it was abolished in England and generally throughout the United States. It was found that the low estimate of human character, which was responsible for the rule, was unjustified; that witnesses generally testify to the truth even when they have an interest in the result of the trial; that the rule often amounted to a denial of justice; and that better results were obtained and more accurate conclusions reached when all parties were permitted to testify publicly, subject to the right of the jury to determine their credibility and the weight of their evidence.

There probably have been, and perhaps there are today, doctors whose testimony could be purchased. Under the present system, if a doctor, who has sold his opinions, testifies falsely, he is almost certain, under cross-examination, to disclose the fact, or to discredit himself with the jury to such an extent as to render his evidence valueless. At least, there is the opportunity, by cross-exam-

ination, of testing in every way his credibility. Under the proposed schemes, if a doctor has sold his opinions, there are little, if any, means of discovering the fact.

To enable a medical expert to form anything like a correct opinion upon many questions of medical science about which he may be asked to testify, it is usually necessary that he should inform himself, as accurately as possible, of the facts that each party is likely to try to establish in the course of the trial. He will usually be required to spend more or less time in studying and reflection upon the the questions presented for his consideration, and in preparing himself to answer the questions likely to be propounded to him. He is often required to make careful chemical, microscopical, and anatomical examinations in order to enable him to form and express an accurate and intelligent opinion. For this work, for which he has become fitted only by years of patient and costly study, he is certainly entitled to compensation—and to such compensation as his reputation and the value of his time authorize him to demand. We cannot get the best men to do this work for any minimum or average fee which might be sufficient for beginners or men of average talents, and we should not expect to do so. The legislature cannot deprive the medical expert of his right to require just and reasonable compensation for his services and, therefore, the compensation that such an expert should receive for his opinions and the labor involved in fitting himself to form an opinion, cannot well be regulated by statute. The constitution of the State provides that “no man’s particular services shall be demanded without just compensation.” In the case of *Buchman vs. State*, 59 Indiana, 1, Judge Worden, in reversing a judgment committing Dr. Buchman for contempt for his refusal to give his professional opinion on a certain question of medical science until he received just compensation therefor, says:

“If physicians or surgeons can be compelled to render professional services, by giving their opinions on the trial of criminal cases, without compensation, then an eminent physician or surgeon may be compelled to go to any part of the State, at any and all times, to render such services without other compensation than such as he may recover, as ordinary witness fees, from the defendant in the prosecution, depending upon his conviction and his ability to pay. This, under the general principles of law and the constitution of the state, he cannot be compelled to do. If he knows facts pertinent to the case to be tried, he must attend and testify as any other

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witness. In respect to facts within his knowledge, as before stated, he stands upon an equality with all other witnesses, and the law, as well as his duty to the public, requires him to attend and testify for such fees as the legislature has provided. Not so, however, in respect to his professional opinions. In giving them he is performing a particular service, which cannot be demanded of him without compensation."

The fact that a party to the litigation employs and pays such an expert for his work—not covertly, but openly and with the knowledge of all concerned—ought not, in my opinion, to detract in the slightest from the value of the expert's opinions. It is not in the least likely, if the witness is a man of good standing and reputation, that his opinion will be influenced by the compensation he receives. It is contrary to all experience that it should be so, for it is a well established fact that, among professional men of character, pride of opinion outweighs all other considerations. If the witness is not a man of good standing, if he has no regard for his opinions or reputation, if he has not within him the instincts of his profession, all these facts may be developed and, in connection with his manner upon the stand, his frankness or lack of frankness, his readiness and ability to answer the questions propounded to him, together with the opinions of other witnesses, will go to the jury, who will determine, and usually determine correctly, the credit to which his evidence is entitled.

While it seems to me, therefore, that the general condemnation of medical expert evidence so frequently indulged in is altogether without justification and that any change in our system of receiving such evidence in the trial of cases is wholly unnecessary, if not impossible, I do not wish to be understood as saying that the practice under this system has at all times been free from abuses.

As a general rule, the criticisms of medical expert testimony found in the opinions of judges, when confined to the facts of the particular case before the Court for decision, are fully justified. There is no doubt but that, in particular cases, there have been serious abuses resulting from the admission of such testimony. Trials have been unduly prolonged by the number of such witnesses allowed to be called; "days and even weeks have been consumed in cross-examinations to test the skill and knowledge of the witnesses and the correctness of their opinions, wasting the time and wearying the patience of both court and jury, and perplexing instead of elucidating the questions involved in the issue;" witnesses have

been permitted to express opinions whom it would be gross flattery to designate as experts and whose ignorance of the principles of medical science was only equalled by their presumption; and disgraceful exhibitions of disputes between the doctors called to testify have occurred, which were manifestly the result of partisan or personal feeling. While these cases are exceptional and have become fewer and fewer each year, decreasing as the requirements for better and higher education among the members of the legal and medical profession have increased, until today they are of rare occurrence, it is to be regretted, on account of the legal as well as the medical profession, that they have not entirely disappeared. They will do so with proper efforts on the part of the members of both of these professions. It is within the power of the judge to prevent some of the abuses mentioned. As we have said before, he can and should limit the witnesses to be called to a sufficient and proper number and confine the range of the cross-examination within reasonable bounds, and he can and should require every witness who offers himself as an expert to show that he has learning and experience sufficient to entitle him to express an opinion. The lawyers engaged in the trial can, and reputable lawyers will, assist the judge by refraining from any attempt to abuse their privileges, by avoiding all efforts at pettifoggery and chicanery, by observing the rules of law, and by confining themselves strictly to the matters involved in the case they are trying. Much, also, can be done and ought to be done by members of the medical profession which would tend, not only to prevent many of the abuses mentioned, but to do away with much of the popular prejudice against medical expert testimony. In concluding this paper, I cannot do better than state, in the language of Judge Bartlett, what can thus be done on your part. "You have," says Judge Bartlett, "a code of medical ethics which every physician and surgeon is bound in all professional honor to observe. By that code you regulate your own conduct in the practice of medicine, and insist that those who join the ranks of your profession from year to year shall agree to regulate theirs. No statute could practically be more binding. Why may you not extend its provisions so as to embrace the conduct of the medical man when he assumes the role of the expert witness? The matter is absolutely within your own control. You can declare in your code that a certain course of action on the part of a medical expert shall be deemed honorable and professional, and that a certain other course of action shall be dishonorable and unprofessional. The

first steps in erecting such amendments in your professional law would necessarily be tentative. Mistakes would be made which you would have to correct. Rules from which the most good was expected might prove useless, and others which promised much less might prove to be the most effective of all. But in making them and changing them, you would be independent of the legislature; you could act solely for the good of your profession untrammelled by official influence or power; and so far as you desire advice from the bench or bar, I am sure it would gladly be afforded. A signal advantage of dealing with the subject in this way is that it would involve no interference with existing rules of judicial procedure. The rights of litigants or the manner of trying lawsuits would in no wise be affected. The needed reforms would be brought about by the compulsory operation of your own code of ethics acting personally upon each member of your profession. That code, amended as I am sure it might be if the physicians and surgeons of this country took the matter seriously in hand, by commanding medical experts to do what is right and subjecting them to professional censure and obloquy if they did what was wrong, would be more efficacious than any law on the subject which any legislature could enact. It would be your own law, adopted by yourselves, and it would have that powerful sanction which belongs alone to laws which are a natural growth out of the conditions which lead to their adoption."

Through such efforts as these, on the part of the members of the legal and medical profession all serious abuses resulting from the present system of receiving medical expert testimony will disappear and this class of evidence will gain and retain that respect and confidence of the people to which it is entitled.

SOCIETY PROCEEDINGS

Fort Wayne Medical Society.

Meeting of January 31st.

Society met in joint session with the Fort Wayne Retail Druggists Association. Called to order by President Drayer, with an attendance of 125, including physicians, druggists, and invited guests. Minutes of previous meeting read and approved.

PAPERS:—“*National Formulary Preparations*” was the title of a paper by Dr. W. O. Gross, in which he said that a more liberal use of the National Formulary preparations, made according to authorized receipts, was the remedy that would bring the pharmacists and physicians into closer relationship. He called attention to the deplorable condition brought about by the constantly increasing demand for and the ever growing number of ready made preparations which have little else to recommend them than the glib tongue of the representative who introduces them for the manufacturer. The physicians are flooded with the literature and samples of many preparations which may be duplicated by following the formula given in the National Formulary, and at a great saving in expense. Many of the trade mark preparations are made from formulæ in the National Formulary and differing only in color. The manufacturer first gets the physician to prescribe such preparations, and a demand having been created for it, the druggist is obliged to keep it in stock. As the list of such preparations is constantly increasing, the druggist is compelled to keep in stock every preparation that he is likely to have a call for, and perhaps many of the preparations cease to be used soon after being introduced. Other preparations after having been endorsed by the medical profession are advertised to the laity by the manufacturer, and thus the proprietary medicine business is benefitted. Scott’s Emulsion and several other well known remedies which first received the endorsement of the medical profession are now advertised in the secular press. There is good reason for believing that many other preparations which are now largely prescribed by physicians will soon be similarly advertised. In this connection the speaker presented a letter from a manufacturing house requesting that their product, previously advertised only

to the medical profession and sold only on prescription, "should be cautiously and judiciously advertised to the public through the daily papers." In the matter of elegance the National Formulary preparations are not excelled, and when the preparations are made by a competent and honest pharmacist the physician not only knows all of the ingredients, but is sure of getting a better quality of chemicals and drugs than are usually used in the special preparations under a trade mark name. The essayist exhibited a large number of samples prepared according to the National Formulary. They included terpineum emulsion, elixir valerianate of ammonia, syrup yerba santa, compound elixir of taraxicum, elixir phosphate of iron—quinine—strychnine, infusion digitalis, emulsion of cod liver oil, and many others. If the druggist and chemist is kept busy along the line of ethical pharmacy he will soon discard the many methods he at the present time is obliged to follow as a means of livelihood, and will devote his entire time to the preparation, analysis and compounding of standard pharmaceutical remedies and the authorized receipts of the National Formulary.

"*Tablets*" was the title of a paper by Edward L. Mertz, in which was discussed the methods of manufacture of tablets, and the advantages and disadvantages to the physician and druggist by prescribing and dispensing them. Tablet triturates and compressed tablets were described. Tablet triturates consist of medicine which has been triturated with sugar of milk until thorough and complete subdivision and distribution of it has been made, and by proper manipulations has been moulded into tablets of uniform size and weight. The details of manufacture were fully described, and the essayist exhibited a large number of tablet triturates of his own manufacture showing that any competent pharmacist is capable of making tablet triturates when called upon to do so. Tablet triturates were recommended in preference to compressed tablets on account of greater solubility. Compressed tablets are a little more difficult to manufacture, and require more time and manipulation of material. The medicinal substance is prepared into granular form by a medium such as cane sugar or gum arabic with water, and when dry is compressed into the form of a disc. An adhesive agent is almost always necessary in making good compressed tablets. The advantages of prescribing and dispensing tablets are few as compared with the disadvantages. The tablet fad cannot be considered as elevating either the profession of medicine or pharmacy. The convenience in prescribing has been more than offset by the

inequality in manufacture and general cheapening of the product through the rivalry of a large number of tablet houses who are catering for the physicians' trade. Not a few of the well known formulas have been made into tablet form, and under a copyrighted name recommended to physicians as superior to anything else for the treatment of a certain class of cases. Gradually these tablets have fallen into the hands of the laity, and as a result the regular call from the public for these tablets without a prescription exceeds the legitimate demand from the physician's prescriptions. A well known tablet house making tablets for the relief of pain, taking advantage of the reputation secured through the recommendation of physicians, is already preparing for the market little pocket cases containing headache tablets, laxative tablets, indigestion tablets, etc., which it is thought will soon be advertised direct to the laity and bought from every druggist without the necessity of a prescription from a physician. The essayist said that he thought it only a short time before tablets for a variety of affections will be placed in slot machines located on prominent corners or in well patronized stores. Tablets are not always safe, because they are frequently insoluble. When fresh the tablets are more likely to be soluble than after being made for some little time. Prescribing and dispensing tablets brings about self medication, and this is well illustrated in the present demand for tablets having a monogram or distinguishing mark on them, the idea of the manufacturer being not so much to prevent substitution as to get people in the habit of recognizing the tablet, and afterwards using it more liberally through the ease with which it may be recognized and called for without recommendation of the physician. The pharmacist is often blamed for counter prescribing when in reality he is only guilty of supplying the demands of customers for certain tablets readily recognized by the monogram which have been originally recommended by the physician. Another injustice is that which requires a druggist to keep tablets of many different manufacturers, even though the formula is the same. If the physician will only take into consideration that a competent druggist can prepare a tablet fresher, more soluble and in every way equal to the manufactured tablets, much of the counter prescribing now indulged in would be stamped out. Furthermore, every physician should prescribe for the individual case, and not find it necessary to prescribe ready made prescriptions which often times do himself and the patient an injustice.

“*The Relation of Physician and Druggist*” was the title of a paper by Dr. W. D. Calvin in which he said that the relationship between doctors and druggists is so close that many questions concerning both should be considered in a joint meeting. At present many physicians and druggists overstep the bounds of their calling. The physician attempts to be his own pharmacist, and the pharmacist by his counter-prescribing attempts to be the physician. Both should be independent of each other, but should not infringe upon the other's territory. The physician should not receive commissions on prescriptions from either retail druggists or manufacturers, and should not accept free office rent or have a financial interest in a drug store. The duties of a physician is to diagnose and treat diseases, operate the surgical, and administer or prescribe for the general cases as time, place and other circumstances indicate. A pharmacist should secure, prepare, preserve and dispense drugs according to the prescriptions of physicians. He should not prescribe or pretend to prescribe for the sick, nor should he in any way conduct himself in a manner contrary to the requirements of a competent and ethical pharmacist. At present the physician is greatly at fault in accepting and prescribing the many pharmaceutical preparations under copyrighted or trade mark names which are offered to him under the solemn advice that they should never be prescribed in other than the original package. In this manner the preparation not only receives the endorsement of the physicians, but in original packages the patient becomes acquainted with its virtues and at once commences the habit of self prescribing which is so pernicious in its effect upon the public, but enriches the manufacturer. The physician should remember that there has not been a single pharmaceutical preparation under a trade mark or special name which excelled the preparations listed as officinal in the United States Dispensatory or National Formulary, and prepared by any competent druggist at one-fourth to one-tenth the cost. Every physician should understand the action and therapeutic uses of all drugs employed in the manufacture of certain pharmaceutical specialties, and be able to prescribe those drugs in combination. The prescription calling for Catchem and Skinem's headache tablets, costing at wholesale a dollar a hundred, but costing the manufacturer less than five cents a hundred, is not a prescription upon which the druggist can make a reasonable profit, and it is always a prescription which requires the greatest expenditure of money by the patient. The demand for these special prep-

arations, first recommended by physicians, stimulates the druggist to action in looking out for his interests, and he at once recommends substitutes of his own manufacture. The result is that almost every drug store now advertises its own cough syrup, headache tablets, laxative tablets, dyspepsia tablets, rheumatic tablets, etc., etc. The essayist said that out of the last thirty cases of gonorrhœa which he had treated, twenty had been previously treated by druggists or their clerks. In nearly every instance such patients were sufferers from posterior urethritis, cystitis and strictures, caused more by the injurious astringent injections than by the primary disease. One of the most potent objections to the securing of drugs without prescriptions is because of the use and abuse of poisons. A traveling man for a manufacturing pharmacist says that he sells every ninety days 15,000 one-half grain morphine tablets to one drug store here in the city for use in supplying the demand of morphine fiends who procure the tablets without a physician's prescription. To another drug store he sells 5,000 heroine tablets which are used by four persons who self administer them hypodermically. To another drug store in another city he sells every sixty days 40 gallons of tincture of opium. The essayist said that the time was ripe for a crusade against patent medicines, self-prescribing, and the use of trade mark preparations by physicians.

The discussion was opened by Dr. B. Van Sweringen who said that it was not necessary for any competent physician to prescribe trade mark preparations or any pharmaceutical specialty whether the ingredients of such were known or not. The National Formulary contains preparations that are not only palatable but elegant in appearance, and by prescribing them the ingredients and dosage will not only always be known to the physician, but the patient will be much more likely to receive the medication required. It was suggested that the pharmacists ought to have a list of the National Formulary preparations printed and distributed to the physicians.

Dr. C. E. Barnett discussed the evils of medicine dispensing by the physician, and contended that the physician who attempts to put up his own prescriptions is usually guilty of substitution which in the end works harm to his patient. The physician should not be influenced by the knowledge that he has not in his case the drug which is really indicated in the treatment of the patient, and the one way in which he can be free of influence is to write prescriptions for everything, and insist that the prescriptions be compounded

by competent pharmacists. He does not believe in insisting upon prescriptions going to any certain drug store, but does believe that in justice to the physician and the patient the prescription should go to a druggist who is competent to compound it properly.

A representative of Wm. S. Merrill & Co., of Cincinnati, who attended the meeting, said that his firm had considered it unwise to put any distinguishing mark upon their preparations, and accordingly had abandoned the practice of putting a distinguishing mark upon their salicylate of soda and some other well known preparations.

Dr. W. P. Whery said that the question of who owned the prescription was one that is often up for consideration. As a matter of fact the prescripton is simply an order upon the druggist to give the patient certain medicine. The patient takes the prescription and acting as a carrier delivers it to the druggist. The prescription might just as well be telephoned or sent by messenger. The druggist is the custodian of the prescripton, and he should take care of the original in order to protect himself. In England after a certain time the original prescription is returned to the physician, and at no time is the prescription considered the property of the patient. Druggists should never refill a prescription except upon the order of the physician, and whenever he does so he makes himself liable for any injury that may result. The physician is responsible for the first filling only.

Dr. J. C. Wallace said that there should be more stringent laws regarding the sale of alcohols and poisons. At present it is possible for any person to obtain poisons from almost any drug store in quantities sufficient to end life. He referred to his personal experience in Philadelphia where druggists are required to keep a record of every purchase of a poison, including the name, age and residence of the purchaser, whom the drug is for and for what use it is to be put to. It was also noted that poisons were kept in bottles of peculiar color and so studded with sharp irrègularities that a mistake in getting the wrong botttle is invariably detected at once. In Fort Wayne it is possible to buy any amount of morphine from five cents worth up to five dollars worth, and no questions are asked. And it is not necessary to have a prescription in order to obtain from drug stores all the alcohol, whiskey or brandy desired.

Dr. A. E. Bulson, Jr., said that one reason for the practice on the part of the physicians of prescribing ready made preparations was that materia medica is not as thoroughly taught in our

medical colleges now as it was a few years ago. Students do not acquire a working knowledge of the action and uses of the principal drugs together with their synergists and incompatables. The young physician is particularly in the habit of prescribing this or that pharmaceutical specialty recommended for the treatment of rheumatism, dyspepsia, chronic constipation, typhoid fever, tonsilitis, or any other disease because the manufacturer asserts that it is particularly adapted for the treatment of such cases, and is to be given in certain specified doses. Self prescribing and the sale of patent medicines has increased in this country largely through the influence of physicians who have been first to educate the public as to the value of certain pharmaceutical specialties which afterwards are advertised in the lay press. The speaker thought it time for all reputable physicians to stop prescribing pharmaceutical specialties, and return to the old time extracts, tinctures, and fluid extracts, and other drugs and chemicals the exact action and uses of which are known.

Dr. K. K. Wheelock condemned the druggists for being a party to the quack medicine advertisements which are now found in our daily papers. More than one reputable druggist in Fort Wayne gives a patent medicine his endorsement to increase the sale of that medicine and secure profit to himself when he knows that the remedy is worthless. Furthermore, not one, but many druggists in the city of Fort Wayne are guilty of attaching their names to quack medicine advertisements which contain language and suggestions that are obscene.

In closing the discussion Dr. W. O. Gross said that he hoped that the members of the society would begin the use of the National Formulary preparations, and to that end would be very glad to furnish books containing the National Formulary.

Mr. Mertz said that counter prescribing is brought about by the demands of the doctor on one hand, and the druggists on the other. The only way to break up the practice is for the doctor to cease prescribing proprietary remedies, so that there will not be such a demand for them on the part of the public. The druggist, when he finds a physician limiting himself to prescriptions requiring the ability of a pharmacist to compound, will very soon quit the practice of counter prescribing.

Dr. W. D. Calvin closed by saying that ninety per cent. of the best physicians today use but twenty drugs. It is better to know

a few drugs and know them well than to have a superficial knowledge of a great many and use none of them intelligently.

The application of Dr. L. R. Fast was read and on motion referred to the Board of Censors.

The following resolution was offered by Dr. K. K. Wheelock:

“Resolved, That it shall be considered unethical by a member of the Fort Wayne Medical Society to prescribe any proprietary medicine, and that we individually agree that we will not permit any representative of a pharmaceutical manufacturing firm to leave in our office any sample of his goods.”

On motion the resolution was laid on the table.

Adjourned.

J. C. WALLACE, Sec'y.

Meeting of February 14th.

The Society met in regular session at the Indiana School for Feeble Minded Youth and was called to order by the Secretary, with fifteen members and a large number of medical students present. On motion, Dr. A. P. Buchman was selected to preside. Minutes of the previous meeting read and approved. This being a clinical night the usual order was reversed and the business meeting held first. The application of Dr. L. R. Fast, of Paulding, Ohio, was then read and on motion Dr. Fast was elected to full membership in the Society.

A communication was received from the coroner, Dr. J. E. Stults, in which he asked the Society to appoint a committee to investigate the action of the county commissioners in refusing to pay bills for coroner's inquests. Following some discussion a motion was made and carried directing the Secretary to notify the coroner that his communication had been received and that in the judgment of the Society the matter is not one upon which Society action should be taken other than to express a hope that he may be able to collect such fees as are properly due him.

Dr. Porter then offered the following resolution:

“Resolved, That aside from members elected and retained in the usual way that this Society establish a life membership to which any member in good standing may be elected by a two-thirds vote of the members present at any regular meeting, and after such election the membership may be retained during good behavior and without payment of dues, the dues for such member to the State Society being paid out of the treasury of this Society.”

CLINICAL CASES:—Case 1. *Cretinism*—Willie H., 15 years of age. No history of parents or grand-parents obtainable other than that the mother was in jail at the time the child was born, though the offense for which she was incarcerated is not a matter of record in the institution. Patient was admitted Dec. 9, 1896, at the age of six and one-half years, and at that time was unable to talk or stand alone without assistance. His tongue was very large, abdomen prominent, and lardosis marked. Patient was the ninth and last of the children borne by his mother. The age of the parents at the time of his birth is not given on the record. The labor was ordinary, babe apparently strong but reared on the bottle. Has one brother and four sisters living, all in good health mentally and physically. In the application for his admission to the institution the cause for his condition is attributed to a scare which the mother received at the fourth month of pregnancy by witnessing a man go into a trance.

Case 2. *Mongolian Imbecile*—Eugene B., aged 19 years, of German descent. History of grand-parents negative. Parents both living. Father's health good, but mother suffers from neuralgia. Three brothers died in infancy. Paternal grand-father's sister feeble-minded. Patient was born when his father was fifty-one and mother forty-five years of age, he being the twelfth born. He was a weak babe, nourished by the mother, and did not commence to walk or talk until five years of age. The patient is a typical Mongolian, obstinate and disobedient at times, but affectionate. His power of mimicry is good. The skin is coarse and almost leathery. The hands are broad and fingers short and stubby. He has a gruff guttural voice. The ears are set far back and are somewhat small. The eyes are blue, almond shaped and oblique; hair light brown, stiff, wirey, and fairly abundant.

Case 3. *Lupus*—Patient, Anna W., aged 14 years, born in Indiana and admitted to the institution from an orphan's home as a middle grade epileptic. No history concerning the grand-parents. Father, a farmer, died following a stroke of paralysis. Mother living. Father was sixty years of age and mother thirty-three at the birth of the child. The child's mental condition is attributed to trouble which the mother had just previous to the birth of the child. The child was the first born and labor was ordinary. The babe was strong and nourished by the mother. A young brother living and physically and mentally well. The child's mental condition is said to have developed at six years. When admitted to the institution

an examination of the heart, lungs and abdomen was negative. On the right shoulder there was a patch the size of a hand which had been diagnosed and treated as ring-worm. A number of times the patch ceased to spread and would get smaller at times, only to take on renewed growth later. Four months ago a patch on the neck appeared which at first was simple and small and in appearance like the patches on the arms. The next patch appeared on the buttocks. The patches on the back and arms and vulva have developed since September 20th, 1904, at which time an injection of tuberculin was given. The patch on the shoulder has been treated with tincture of iodine, ten per cent salicylic acid ointment, and equal parts of carbolic acid and Balsam Peru. Potassium iodide has been given in sixty grain doses, but discontinued on account of severe gastrointestinal disturbance which followed. The tuberculin injection produced a severe reaction, the temperature reaching 105 2-5. The injection also produced vomiting and a general aching. The patches became redder, tender and moist, discharging a thin serum. Diagnosis established by the tuberculin injection.

Case 4. "*Offered for Diagnosis*—Chester P., aged 19 years. Paternal grandfather died at the age of 69 of chronic bowel trouble. Father died at 33 from typhoid fever, and mother at 27 from pulmonary tuberculosis. Patient was the third born in a family of four children, when his mother was 24 years of age. Labor normal; babe strong and nourished by mother. Commenced to walk at about one year of age. Later he attended four or five terms of school and progressed nicely, being very attentive to his studies. At ten years of age he commenced to stammer and exhibit slight twitching of the palpebral and other muscles about the face. His brothers and sisters have complete co-ordination and are in good health mentally and physically. He was admitted to the institution in 1901, after being an inmate of the Southern Hospital for Insane. At that time his weight was 130 pounds, and he was well developed and showed the appearance of good nourishment. His weight gradually increased until May, 1902, when he weighed 139. One month later his weight decreased nine pounds, with a still further decrease of 15 pounds in the subsequent month, having lost in two months 24 pounds or an equivalent of 1-5 of his former weight. An investigation led to the belief that the decrease in weight was due to the fact that the patient was unable to obtain sufficient nourishment during the one-half hour allotted to the inmates for each meal. Failure to obtain sufficient nourishment

was due to slow mastication and deglutition. He was admitted to the hospital, and upon being allowed to take from one to two hours for each meal he was able to regain his weight. In November, 1902, he presented a general bronzing of the skin but no pulmonary signs could be elicited. At that time his weight was 114 pounds, and it gradually decreased during the next twelve months so that in November, 1903, he weighed only 96 pounds. At this time pulmonary signs were detected and he was put upon open air treatment, and small doses of creosote in olive oil as a menstrum. During the first month of his treatment his weight increased seven pounds, and this increase continued until on January 1, 1905, he weighed 140 pounds. The objective signs, the only ones possible to obtain on account of his obstinacy, are as follows: Speech extremely slow, laborious and very indistinct. Gait, not ataxic but very shuffling. In starting to walk he stands on his left foot a few moments, when suddenly he advances with the right foot a few inches, bringing the left rapidly forward and keeping it close to the floor. After implanting the left foot he quickly brings the right to a position parallel with the left, when he again advances with the left and continues to repeat the previous movements. The pupils are equal in size and react normally to light and accommodation. No Rhomberg sign. The patellar reflexes were exaggerated until recently when it became impossible to elicit them owing to constant muscular contraction. The tongue is unsteady when his mouth is open, and also when he attempts to move it. Any muscular effort seems to be difficult and more or less incoordinate. Abdominal and cremasteric reflexes absent. Slight dermatographism.

Case 5. *Mitral Stenosis*—W. G., aged 16. Admitted to the institution as an epileptic. Has had both acute rheumatism and diphtheria. Examination of the heart shows the apex beat at the fourth inter space, one-half inch inside the nipple line. There is a diastolic murmur in the mitral area, not transmitted.

Case 6. *Valvular Disease*—C. R., epileptic, aged 32 years. Has had measles, whooping-cough and scarlet fever. Diastolic murmur is heard loudest at the aortic cartilage and also at the base and apex. Presystolic murmur is heard best above and internal to the apex only.

Case 7. *Valvular Disease*—W. L., medium grade imbecile, aged 19. Father 61 and mother 29 at the birth of the child. Has had measles and mumps. Has a right inguinal hernia. Examination of the chest negative. The apex beat is one and one-half inches

outside the nipple line in the fifth inter space. There is a marked systolic thrill, having its greatest intensity at the second inter space one inch from the sternum. The systolic murmur is heard all over the chest, though loudest over the mitral area. All of the valves are involved except the tricuspid.

Dr. B. Van Sweringen opened the discussion. Speaking of the Cretin case he said that the photograph of one cretin was almost a duplicate of the photograph of another, as nearly all cretins look alike. These cases all exhibit a great change under the administration of thyroid extract, so that after a course of such treatment you can scarcely recognize the case. The case under consideration has been under this form of medication for nine or ten years and has shown great improvement. In this connection he reported a case of myxoedema in a woman fifty years old. She had slow cerebation, great patches of mucin deposits under the eyes, and other well known evidences of the disease. All of the symptoms have been removed by treatment with thyroid extract, five grains each day.

Dr. M. F. Porter, speaking of the lupus case, said that the lesions macroscopically do not present the appearance of lupus. There are no nodes and no ulceration. Said that before making a diagnosis of lupus he would want to know that the tubercle bacilli were not found elsewhere. If the case is one of lupus tuberculin ought to cure it. He suggested making a section and examining for tubercle bacilli to clear up the diagnosis.

Dr. C. E. Barnett said that according to Fox the case under consideration follows the history and description of lupus. As the tuberculin reaction was pronounced a diagnosis of lupus was warranted by exclusion.

Dr. A. P. Buchman, commenting on the same case, said that degenerate children do not always present typical lesions. Therefore the classical description and appearance of lupus might not apply in this individual case. He thought a diagnosis of lupus was warranted from the appearance of the lesions and results obtained by tuberculin injection.

Dr. B. Van Sweringen said that in this case he had made a careful examination of the chest, and in his opinion there was no tuberculous process there. There was, however, a marked reaction to tuberculin, and he therefore considered that the lesion was tuberculous. There is not, however, enough ulceration and destruction

to warrant a diagnosis of lupus vulgaris, nor does he think it erythematosis.

Dr. J. B. McEvoy, speaking of the cretin case, said that he had taken a photograph of the case one month after beginning the thyroid treatment. At that time the patient could not walk but constantly sat in a chair. The tongue was thick, the skin the color of dough, and there was no hair on the head. Six or eight weeks later the hair began to come in naturally, and there was a marked change in the appearance of the patient occurring as a direct result of the thyroid treatment.

Dr. Chas. E. Barnett said that in these cases an interesting feature was the arrest of development in many organs. The first "post" that he ever saw on this kind of a subject the kidney looked like a bunch of grapes. The thyroid treatment produced polyuria due to irritation to the kidneys, and some of the patients show sugar in the urine after taking thyroid extract.

Dr. C. R. Dancer, speaking of the Mongolian imbecile, said that the reason they are called Mongolian imbeciles is because they are of the Mongolian physiognomy. Many are born when their parents are aged, and on inquiry we find a decided neurotic history in the family from which they came. They do not improve mentally. They improve only by imitation. They practically all die from tuberculosis.

Adjourned.

J. C. WALLACE, Sec'y.

Meeting of February 28th.

Society met in regular session at the Fort Wayne College of Medicine, with President Drayer in the chair, and 32 members and a large number of medical students present. Minutes of previous meeting read and approved. Application of Dr. L. E. Brown was read and on motion referred to the Board of Censors. On motion the request of Dr. G. H. Hoffman for a withdrawal card was granted. The resolution of Dr. Porter at a previous meeting was re-read and on motion adopted.

CASE REPORTS:—*A Case of Suprapubic Prostatectomy* was reported by Dr. Maurice Rosenthal. The patient, aged 73 years, was operated a week previously and at the time the report was made gave evidence of making a complete recovery.

The meeting was devoted to a symposium on Pathology, and included demonstration of a micro-photographic apparatus, charts,

and microscopic slides, stereoptican views of sections of tumors, and the exhibition of gross specimens from the college museum.

Dr. M. I. Rosenthal spoke about some of the supposedly rare forms of malarial plasmodia common to Italy, but said that he had been able to demonstrate the presence of the same in the blood of some of his patients. The subject was illustrated by drawings on the blackboard, as well as microscopic slides shown in the laboratory.

Dr. J. B. McEvoy demonstrated the working of the micro-photograph apparatus and gave his method of preparing slides and lantern plates. Sections of the following were shown either by stereopticon or microscope: Fibroma; giant celled sarcoma; small round-celled sarcoma; small and large spindled celled sarcoma, (the large spindle celled sarcoma had several thin walled blood vessels in it and showed the ease with which metastasis could occur through the blood stream); true melanotic sarcoma; alveolar sarcoma; papilloma; endothelioma of the pleura; non-malignant lipoma; keloid; chondroma. Other views of medical interest were thrown on the screen by stereopticon. One was the picture of the first president of the Fort Wayne Medical Society, Dr. I. M. Rosenthal, with his signature, and reproductions of some of the illustrations appearing in the newspapers, advertisements of patent medicines, etc. A large number of interesting microscopical sections were shown in the laboratory, and the college museum was thrown open for the inspection of members and guests.

Adjourned.

J. C. WALLACE, Sec'y.

The Indiana State Medical Association.

The annual meeting of this Association will be held at West Baden-French Lick on Wednesday, Thursday and Friday, June 7, 8, and 9th. Secretary Heath announces that there will be an excellent scientific program, with such arrangement of papers and time for their reading that thorough and comprehensive discussion of each paper will be possible. The committee on arrangements announces that the social features of the meeting will be of a particularly attractive nature. Receptions, musicals, dances, carriage drives, and other social functions form a part of the program. The place of meeting is in itself very attractive on account of its well known popularity as a health resort, and the very satisfactory accommodations afforded all visitors. It is expected that the West Baden-

French Lick meeting will be exceptionally well attended, and the medical profession of Indiana is invited to assist in making the meeting the best in the history of the Association. The usual reduction in railroad rates has been granted, and all railway agents are in position to give full information regarding railway connections and other items of interest.

The Northern Tri-State Medical Association.

The Northern Tri-State Medical Association will hold its mid-summer meeting in Fort Wayne on Thursday, June 15th. The scientific sessions will be held in the assembly room of the court house, and the program contains papers by well known physicians residing in Indiana, Ohio and Michigan. The principal address will be delivered at the evening session by Dr. Nicholas Senn, of Chicago. The social features of the meeting will consist of a smoker and musical program at the Fort Wayne Club. A large attendance is expected, and the medical profession generally is invited to attend.

Noble County Medical Society.

The annual meeting of the Noble County Medical Society was held at Albion on Tuesday, May 2nd. The meeting was very largely attended. The subject for the day was "Typhoid Fever," various phases of the subject being considered in papers by Drs. F. R. Clapp, Ligonier, Geo. B. Lake, Wolcottville, B. Van Sweringen, Fort Wayne, J. H. Nye, Cromwell. A very interesting medical clinic was conducted by Dr. Van Sweringen, four or five cases being presented for examination, diagnosis and suggestions as to treatment.

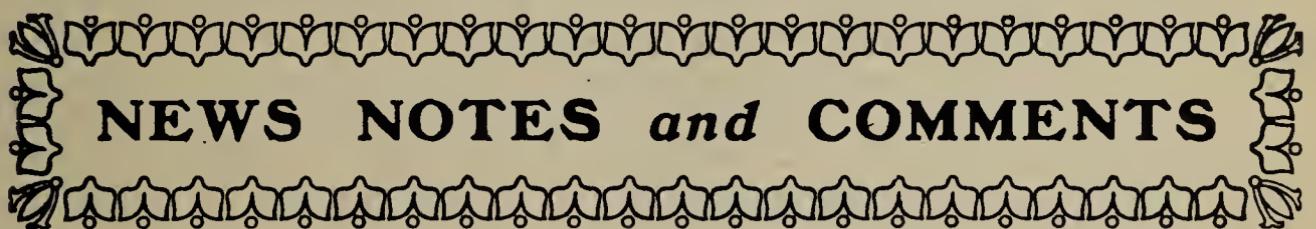
Thirteenth District Medical Society.

The first meeting of the Thirteenth District Medical Society, comprising the counties of Saint Joseph, Elkhart, Marshall, Starke, Fulton, Kosciusko and Pulaski, was held at the city hall at Plymouth, Ind., on April 13th. The officers of the society are: President, G. N. Thompson; Vice-President, J. J. Becknell; Secretary and Treasurer, J. B. Berteling. The attendance at the meeting was exceptional, there being fully one hundred physicians present, the majority of whom remained throughout the entire program. The program consisted of twelve papers, only two of which (those by A. E. Bulson, Jr., Fort Wayne, and W. N. Wishard, of Indianapolis) were presented by physicians not residing in the district. A banquet was held at Hill's Cafe at 6:00 p. m. The papers and discus-

sions were uniformly excellent, and the future success of the society seems assured.

Elkhart County Medical Society.

This society held its annual meeting at Goshen on the afternoon of March 23rd, in the Knights of Pythias hall. Eight papers were read and discussed at the afternoon session which continued until seven o'clock, when, after a short recess, those present sat down to a most enjoyable banquet. The attendance numbered fully one hundred, including several invited guests from Chicago, Indianapolis, South Bend, Fort Wayne and other cities.



NEWS NOTES and COMMENTS

Commencement Exercises of Fort Wayne College of Medicine.

The twenty-sixth annual commencement exercises of the Fort Wayne College of Medicine were held at the Masonic Temple, Tuesday evening, April 18th. The members of the graduating class were: Charles E. C. Beach, Ralph Morton Bolman, Bertram U. Doolittle, Bertha Goba, William Owen Hildebrand, Homer Earl, Line, Jesse Lynn Macbeth, Marguerite B. Parry, John Ernest Rarick, Lyman Talmage Rawles, Ph. C., Guy Addison Smith, Otto Herman Swantusch, Charles Sumner Wiseman. The exercises of the evening consisted of an address by Rev. A. S. Preston; valedictory by Dr. L. P. Drayer; and conferring of the degrees by the president of the Ohio University. The music was furnished by Reineke's full orchestra. Following these exercises the Alumni Association gave a banquet at the Randall hotel, with an attendance of about 250, including members of the faculty, members of the graduating class, and Alumni Association. At this banquet Dr. J. L. Gilbert, of Kendallville, presided as toastmaster, and responses were made by Dr. C. B. Stemen, Dr. E. V. Hall, Dr. Le Roy A. Belt, Dr. Guy A. Smith, Mr. John Dougall, Dr. Miles F. Porter, Dr. H. A. Deumling, Dr. W. F. Carver. The annual meeting of the Alumni Association was held during the afternoon, with election of officers. The visiting Alumni were entertained during the day with a surgical clinic and luncheon given at the Saint Joseph hospital by Dr. Maurice Rosen-

thal, and a surgical clinic and luncheon given at the Hope hospital by Drs. M. F. Porter and Budd Van Sweringen.

Dr. W. H. Myers, of Fort Wayne, for many years one of the most prominent surgeons in Northern Indiana, has, as a result of failing health, decided to retire from practice. He has recently taken up residence for an indefinite period with relatives at Niles, Mich.

Health Officers School.

The State Board of Health has sent out a call for the Annual Health Officers School which will be held in Indianapolis, June 1-2. The county and city health officers, about 300 in number, will be summoned. The Claypool Hotel will be headquarters and the sessions will be held in the hotel auditorium.

The teachers will be Dr. Joseph McFarland and Dr. Seneca Egbert, of Philadelphia, Prof. R. L. Sackett, of Earlham College, and Drs. Bond and Grant, of Richmond.

All physicians are cordially invited to attend these lectures, and the general public is also invited.

Special hotel rates will be given and very probably special railroad rates will be secured.

For Sale.

An X-Ray coil fully equipped for immediate use. Yields 30 inch spark. Supplied with motor generator to control 500 volt current; also with wall plate used for storage batteries; fluid rheostat and mercury interrupter with dynamo. A Piffard Hyper Static apparatus for high frequency currents also goes with the coil.

This coil which was specially constructed for the owner is probably the largest one ever built and is fully complete and modern.

For price inquire of F. S. Lumbard, Bass Block, Fort Wayne, Indiana.

DEPARTMENT OF SURGERY GYNAECOLOGY *and* OBSTETRICS

In Charge of Miles F. Porter, A. M., M. D.
Professor of Surgery and Gynaecology in the Fort Wayne College of Medicine,

A Simple Method of Operating on Piles.

A. B. Mitchell, M. B. (*British Medical Journal*): The author's method of operation on hemorrhoids is as follows: The sphincter having been dilated and the piles brought fully into view, the mucus membrane is sponged with a solution of corrosive sublimate, 1 in 1,000. A pile is then clamped in a long, narrow-bladed artery forceps, and the redundant mucous membrane and pile are cut away by scissors. A curved needle threaded with catgut hardened in formalin is then inserted immediately above the clamp and the end of the catgut secured by a knot. A continuous suture is next rapidly applied around the clamp, the clamp is withdrawn (this can be done without the slightest difficulty), and the suture tightened, a vertical line of sutures within the rectum. Each pile should be similarly treated in turn.

The operation is rapid, there is no loss of blood, no raw surface is left, and the bowels are encouraged to act regularly from the first. The catgut is absorbed in eight or ten days and does not require removal.

[The above method I have used often and now employ it in preference to any other in the majority of cases. It is speedy, safe, radical, and simple.—ED.]

Cardiolysis.

Not content with the success achieved in the treatment of wounds of the heart, surgeons have taken upon themselves to suggest a remedy for the relief of so-called adhesive pericarditis. A year ago Brauer recommended a novel method of treatment which he called cardiolysis, for certain cases of so-called adhesive mediastinal pericarditis, those cases in which the adhesions are not within but without the pericardial sac. Adhesions resulting from a mediastinitis or pleuritis bind the heart, pericardium, and large vessels to the neighboring structures (sternum, posterior mediastinum, diaphragm, and lungs). Either these structures must move with the movements of the heart or they will interfere with the heart's action.

As a result of such interference certain clinical phenomena, quite peculiar to the condition, are evoked—*e. g.*, cardiac insufficiency, cirrhosis of the liver, with ascites and dyspnœa. On palpitation a strong pulsation may be felt, and on inspection the thorax in the pericardial region may be seen to be drawn in with each systole. Auscultation will reveal, in addition to the normal heart sounds, an additional sound which followed the second normal heart sound. The prognosis in these cases is grave; the mechanical interference of the heart's action eventually leads to a condition of insufficiency. It is the object and purpose of the operation to relieve the heart of its embarrassment by removing a portion of the fixed structures to which the adhesions are attached, namely, the thorax. The operation consists in a resection of a portion (5 cm. to 7 cm.) of the fourth and fifth ribs. It has been suggested that an attempt be made to free the adhesions without removing any of the bony chest wall; but such a procedure would be very difficult of execution, and in no way prevents the recurrence of adhesions.

The results of the operation are recorded as more than gratifying. In the three cases in which it was carried out there was a very marked improvement; the œdema, the dyspnœa, and cyanosis as well as the ascites disappeared. In two cases the patients, from being bedridden, returned to work, while the third died of some inter-current affection one month after operation.—*Progressive Medicine*.

Treatment of Sterility.

Dr. Peter Horrocks (*Lancet*, January 9, 1904. Ref., *The Birmingham Med. Review*, March, 1904, quoted in the *Post Graduate*), says treatment, of course, depends upon what is discovered by the examination.

1. *No treatment* where woman healthy and not been married three years. If still sterile after three years she may then return for advice.

2. *Food and Exercise*.—Simple food and work, or its equivalent of physical exercise. No alcohol or drugs, especially opiates or sedatives. If the patient is fat permanganate of potash, one or two grains in tabloids after food, three times a day, is good. Spare diet is supposed to improve the chances of having a male child.

3. Tonics can be given if the patient is in bad general health.

4. *Change of Environment or Climate*.—A town patient may be sent to the country. Generally a warm climate is more favorable

to fertility, so such countries as India, South Africa, Italy, Madeira, France, Cornwall, and Devonshire, are suitable. Sending patients to hydropathics or spas is often useful.

5. *Specifics*.—This applies to syphilitic parties only, so mercury or mercury and iodid.

6. *Local Treatment*.—This depends upon what is found by examination. Morbid conditions of the vulva, vagina, cervix, and uterus must be dealt with on ordinary lines. Where there is reflex spasms of the vagina with expulsion of semen post coitum, put in a vulcanite pessary and advise incomplete penetration. Stem pessaries and electricity are of little service. When the fallopian tubes or the ovary is the seat of old inflammatory changes it is not justifiable to perform laparotomy for it alone owing to the risk to life. Should the abdomen be opened for any other cause, then the freeing of adhesions and the opening up of a closed fallopian tube might prove of great service.

7. *Regulation of Coitus*.—Remove all source of pain; advise against excess, and recommend a day or two before the aura as the best time. It might be necessary to enforce abstinence for a week to a month or more.

8. *Natural Habits*.—Be sure a vaginal douche is not being used for any supposed vaginitis. Should all measures fail, attention must be turned to the husband as a possible cause of sterility.—*Buffalo Med. Jour.*, Aug. 1904.

Treatment of Acne.

Stelwagon says that ergot given internally is the most potent remedy known in the treatment of severe acne from uterine irritation.

Eight Tetanus Patients Treated with Injections of Cerebral Emulsion.

(Th. Holabut, *Przegląd lek.*, No. 10-11, 1904).—The presence of tetanus antitoxic qualities in cerebral emulsions, as demonstrated by several experimenters has encouraged the writer to test the value of these emulsions in cases of tetanus. An emulsion of rabbit's brain and normal saline solution, filtered through sterile gauze was used. The injections were painful, but produced no local inflammation, and were made every two to four days depending upon its reaction. Of eight patients six recovered, but no immediate change was observed in any case, as the spasms and duration of dis-

ease could not be altered, nor could in early injections any change in course be observed. The writer thinks we would not be optimistic in its use, but for want of any better remedy we should use it.—*Medical Fortnightly*, Nov. 25, 1904.

The Uterine Sound.

Don't pass a uterine sound under the following conditions:

1. During an ordinary menstrual period.
2. During an acute inflammatory attack of uterus, ovaries, pelvic peritoneum, or connective tissues.
3. In the presence of cancer of the cervix or body of the uterus.
4. If the patient has missed a menstrual period.—Hart and Barbour.

DEPARTMENT OF MATERIA MEDICA, THERAPEUTICS AND PEDIATRICS

In Charge of Budd Van Sweringen, M. D.

Professor of Theory and Practice of Medicine and Clinical Medicine in the Fort Wayne College of Medicine.

Eserine Salicylate in the After-Treatment of Abdominal Section.

Daniel H. Craig, *N. Y. Med. Jour.*, March 18, 1905, recommends the administration of eserine salicylate in laparotomies done in the absence of sepsis to stimulate peristalsis and prevent the necessity for the administration of a purgative as also the suffering from distension by gas, which is such a constant source of complaint in these cases. A dose of 1-100 grain of atropine is given an hour before the operation to prevent the secretion of mucus during the etherization. It is also held that the atropine is an intestinal stimulant and exerts this effect after the operation. The eserine salicylate is given in dose of 1-100th grain after the section has been made and it is determined that there is no contraindication.

Attention is directed to the fact that stock solutions of the sulphate should not be employed because they are unstable. The salicylate may be obtained in tablet form from any good manufacturer and should itself be dissolved as needed.

The author claims that the trauma incident to an ordinary laparotomy results in inhibition of peristalsis through the splanchnics

and that eserine lessens the activity of the reflex centres in which the splanchnic inhibition is generated.

He says further that it has a direct action on the intestinal musculature similar to that seen in the case of the ciliary muscle.

When this agent is employed there is very seldom any necessity for the post operative cathartic and there is no tympany.

Subcutaneous Alimentation.

In *American Medicine*, Feb 11, 1905, Arthur E. Barker contributes a short article upon his experience in using nutritious substances subcutaneously. The substance he has found best suited for this purpose is a 5% solution of glucose in normal saline solution. He says that normal saline solution should contain 1.9% of sodium chloride instead of 1.6% as ordinarily made. The former proportion produces a fluid which has the same freezing point as blood. The 5% glucose solution also has the same freezing point as blood and given at blood heat causes no pain nor any destruction of blood corpuscles.

In all asthenic conditions it has been productive of good in his hands. The glucose may be added to the saline where the latter is indicated in any condition in which it is desirable to increase the nourishment taken.

There is no glycosuria produced by such use of it. It is imperative that the solution be sterile.

Simple Goitre Treated with Boric Acid.

F. W. Back, in *American Medicine*, March 25, 1905, reports his experience with boracic acid in the treatment of simple parenchymatous goitre. In doses of 10 grains four times a day it caused a reduction in size from one-half inch to seven-eighths inch in ten days in three of the cases and is reported to have relieved the symptoms in the fourth, although no reduction in size was obtained.

When given largely diluted with water no ill effects were noticed although it was continued until an ounce of the drug was taken before a rest was taken.

Serum Therapy of Syphilis.

Dr. Justin DeLisle, *N. Y. Med. Jour.*, Dec. 24, 1904, reports some results obtained in the treatment of syphilis by a serum which, he says, is not an antitoxine, but a toxine for the bacillus of syphilis for which it has a particular and specific destructive affinity.

The dose, 20 c. c. was given at intervals of one week and they were generally productive of a reactionary chill and fever, lasting in some cases as long as forty-eight hours. The treatment continued for several months. One case had thirteen such doses when without permission he married. During the first intercourse the cicatrix of the chancre was torn and the vagina flooded with blood. No infection of the wife followed, thus proving the husband's blood incapable of conveying the infection.

All of the cases reported do not show such favorable results, but in the opinion of the reporter the results are better than by any other method.

DEPARTMENT OF OPHTHALMOLOGY OTOLOGY, LARYNGOLOGY & RHINOLOGY

In Charge of Albert E. Bulson, Jr., B. S., M. D.

Oculist and Aurist for St. Vincent's Orphan Asylum, the Allen County Orphan Asylum and the U. S. Pension Bureau for Northern Indiana and Northern Ohio; Professor of Ophthalmology in the Fort Wayne College of Medicine, Fort Wayne, Indiana.

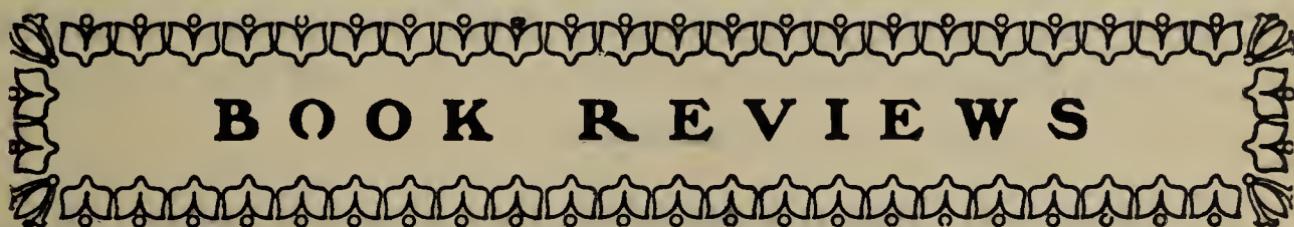
Report on the Use of Dunbar's Hay Fever Serum.

In the April *Medical and Surgical Monitor* Dr. J. F. Barnhill reports the results of his observation in the treatment of two cases of rose cold and eight cases of hay fever with Dunbar's hay fever serum. Those cases were selected whom it was thought would not object on account of the expense incurred to use the remedy in sufficiently often and large amounts throughout the season to thoroughly test its efficacy. The two cases of rose cold were very greatly relieved, but of the eight cases of hay fever only three were apparently benefitted to any great extent, and of the three obtaining benefit the relief was not greater than the relief obtained by other agents. It is therefore thought that failure to relieve was due to the inefficacy of the remedy in those particular cases. During the same interval, and therefore under the same conditions pertaining to heat, dust and pollen factors as causative agents in hay fever, Dr. Barnhill treated an equal number by what has been termed the Helmholtz quinine method of treatment, which consists in spraying the nose with solutions of quinine (grains 15 to 1 oz.) and applying in the nose an ointment consisting of thirty grains of quinine to one ounce of yellow vaseline. The result obtained in those cases treated by this simple and inexpensive method were

equally as good as in those with whom the Dunbar serum was employed. Dr. Barnhill also takes occasion to criticize the method in which the serum is put before the trade, and the manner in which it is shrewdly advertised so that every user of the original packages (practically the only way in which it can be prescribed) will at once procure the remedy direct without the intervention of the physician.

Some Points of View in Regard to the Time When to Perform Myringotomy and the Mastoid Operation.

E. Amberg cites a large number of authorities the consensus of whose opinion seems to be that early incision of the drum membrane and early operation in mastoiditis are the course of election. The author divides the cases of acute mastoiditis into three groupes: (1) Those which take a rapid course, clearly showing alarming local and general symptoms, especially of a toxemic character, and which do not respond to palliative measures. (2) Those which take a somewhat more protracted course, extending over a period of one or several weeks, exhibiting plain local symptoms, but which are not accompanied by intense pain nor by a grave affection of the whole system, and which, at least temporarily, respond to palliative measures. (3) Those which take a mild course. The first type should be called mastoiditis acutissima; the second, mastoiditis acuta; the third, mastoiditis subacuta. In general, when deciding whether to operate or not to operate in a case of mastoiditis we had better err to the safe side and open the mastoid. We can never come too early under any consideration, but we may in some cases miss the right time and be too late if we hesitate. An antrotomy in acute mastoiditis can be compared to a myringotomy in acute suppurative otitis media.—*Medical Record*, April 15, 1905.



BOOK REVIEWS

Diseases of the Eye and Ear.—A Manual for Students and Physicians. By Arthur N. Alling, M. D., Clinical Professor of Ophthalmology in Yale University, Department of Medicine, New Haven, Connecticut, and Ovidus Arthur Griffin, B. S., M. D., Late Demonstrator of Ophthalmology and Otology, University of Michigan, and Oculist and Aurist, University Hospital, Ann Arbor, Michigan. In one 12mo volume of 263 pages, with 83 illustrations. Cloth, \$1.00 net. Lea Brothers & Co., Publishers, Philadelphia and New York, 1905.

This book belongs to the medical epitome series issued by Lea Brothers & Co., of Philadelphia. The work is prepared primarily for the use of students, and of necessity an intentionally condenses

only the cardinal facts pertaining to the subject of ophthalmology and otology. To the general practitioners who may wish to refresh or supplement their knowledge to date, the book will prove valuable, as it is a brief manual rather than a mere compend.

A. E. B., JR.

The Ophthalmic Year-Book.—A digest of the Literature of Ophthalmology, with Index of Publications for the year 1903. By Edward Jackson, A. M., M. D., Emeritus Professor of Diseases of the Eye in the Philadelphia Polyclinic; President of the American Academy of Ophthalmology and Oto-Laryngology; Ophthalmologist to the Denver County Hospital, St. Anthony's Hospital and Mercy Hospital, Denver, etc. With forty-illustrations. The Herrick Book and Stationary Company, Denver, Colorado. 1904.

This book of three hundred pages, has, in accordance with the object of the author, furnished two things. First, a critical digest of the most important literature of the past year, judging it from the standpoint of the ophthalmic surgeon. Not extracts or an outline of that literature, but the important things given sufficiently in detail to make them applicable in practice. Second, a list of the more important original communications appearing during the year.

The design is to help the practitioner in this branch to keep up with the progress of the specialty, and with this to supply a series of volumes which will bring him in touch with all of the more important recent communications upon any subject. The author has succeeded in including a resume of all the important contributions to ophthalmologic literature, while at the same time excluding all unimportant matter which, though interesting, does not mark any advance in ophthalmology. The index is particularly useful in rendering promptly available all that is important in the Year-Book- and through the Year-Book all the important matters current in ophthalmic literature. The enterprise is well worthy of support and every progressive ophthalmologist should be a regular subscriber for the Year-Book.

A. E. B., JR.

J. B. Lippincott Company announce that they will publish during the present year a translation by Dr Albion Walter Hewlett of the Third German Edition of the "Principles of Clinical Pathology" by Dr. Ludolph Krehl, with an introduction by Dr. Wm. Osler, of John Hopkins University. The work is well known in this country and in Europe as an authority upon the subjects treated, and has been copyrighted in the United States under the Interim Copyright Act.

Fort Wayne Medical Journal-Magazine

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Vol. XXV JUNE 1905 No. 6

EDITORIALS

Triumph of Japanese Field Surgeons.

Statistics from the chief surgeon of Gen. Oku's army prove that the army surgeons and field hospitals have scored a triumph in surgery and medicine. There have been only forty deaths from diseases in the whole army since the landing on May 6. Up to the 1st of December, 24,642 cases of disease were treated. Eighteen thousand five hundred and seventy-eight patients recovered, 5,609 were sent to Japan, 40 died, and the rest are still under treatment.—*Medical Fortnightly.*

It is to be hoped that we and all other civilized nations will profit by the lesson Japan has taught us as to the necessity of wise and efficient medical supervision of armies. Russia's defeat in the war now going on between that nation and Japan is due in no small measure to the better health of the Japanese as compared with the

Russian soldiers and this better health is due to the efficient medical organization in the Japanese army—the most efficient organization of the kind the world has ever known.

It remains to be seen whether this lesson which the Japanese have taught us, together with the miserable failure of the French along the same lines in Panama will cause “the powers that be” to place an efficient health board in Panama, with powers which will enable them to do their work as it should be done—promptly and thoroughly.

M. F. P.

The Automobile for the Physician.

The busy and progressive practicing physician usually welcomes any improvement in the manner of doing his work, but, generally speaking, he has been a little tardy in recognizing the value of the automobile as not only a means of enabling him to do more work in less time but at a considerable saving in expense as compared to the cost of maintaining horses and carriages. It is quite true that the automobile industry is still in its infancy, yet it has attained such growth that it has assumed an importance which warrants the listing of the manufactured product as one of the necessities of this progressive age. Four or five years ago the automobile was a vehicle of uncertain usefulness except as a means for giving the well-to-do a certain amount of pleasure because of its novelty, and more often the pleasure obtained from riding in the self propelled vehicle over our ordinary roads at a speed approaching that of the average railroad train was more than offset by the frequent failure of the car to work because of breakage, faulty mechanical construction, or defect of one kind or another. Even now cars may be obtained which will give the user all sorts of trouble, but in such instances it will usually be found that the car has been cheaply made by some firm having little or no experience in the business, and who has failed to profit by the experience of those who have produced successful cars. It is also true that automobiles will be still further improved in the future, but the fact remains that the 1905 car of nearly all the well established automobile manufacturers is a practical success, and when judiciously and intelligently used will give its owner good return upon his investment. In no business pursuit can the automobile make a better showing than in the practice of medicine. Not only will the automobile enable the physician to visit more patients in less time, and in practically all seasons, but at a decided saving in expense as compared to the cost of doing the same work

with horses and carriages. The initial expense need not be great as there are nearly a dozen cars of established reputation for reliability which may be purchased at prices ranging from six to eight hundred dollars. Like any piece of machinery an automobile requires care, but if the physician will give his automobile in care not to exceed one-quarter of the time he gives to the care of his horses and carriages he will have little trouble and get ten times more work out of it. In cities where there are paved streets the automobile may be used the entire year, but in the country in this region, the deep snow and deep mud during a few weeks of the year will prevent its practical use during that period. A moderate amount of snow or mud offer no barriers to the successful employment of the automobile in country practice. The intending purchaser of a motor car will do well if he selects his car from any of the old established and reputable automobile manufacturing concerns. He may be able to obtain just as good or a little better car from some new factory just commencing business, but the chances are that the new car is an experiment whereas the car from the old established firm is not an experiment and the firm has a reputation to sustain which will not warrant the production of inferior cars. After purchasing a car the physician should remember that while the car is an inanimate thing, yet it has life, and the only way to sustain that life is to give the car proper sustenance in the way of gasoline, water, oil, regular cleaning and inspection, and reasonably careful driving. If these rules are followed no physician will have reason for regret that he has adopted the motor car as a part of the necessary equipment for the practice of his profession.—A. E. B. Jr.

The Physician's Vacation.

It has been reported that Russell Sage claims that no man of proper habits ever needs a vacation, and he couples with this assertion a statement to the effect that he never had but one vacation and during that brief week devoted to rest he lost through the fluctuation in the price of stocks, because he was not on hand to protect himself, the sum of two million dollars. It may please Russell Sage with his sordid and pessimistic views, to do without vacations, but the American people, following the practice of many older countries, are now permanently wedded to the idea that occasional periods of rest and recreation are absolutely essential to their health, pleasure, and industrial progress. As an evidence of this we have only to take into consideration the growth of the

summer excursion business, the tendency for people of even moderate means to have summer cottages away from cities and towns, and the tendency among nearly all employers of labor to grant their employees from one to four weeks of every year for vacation purposes. The rest from the responsibilities of work, and the change of scene and occupation is always beneficial, and the employee returns to his duties refreshed in body and mind. Medical men have always recognized the value of rest and recreation as a means of recuperating and increasing the physical and mental capacity and endurance of man, but as a class they have been slow to practice what they have taught. This is particularly true among the physicians of the smaller towns and villages where it is often possible to find men who have been actively engaged in professional work for years without having taken as much as a three days vacation from their routine work. Many times this slavish attention to business is due to the mistaken notion that opportunity for a vacation can not be found, though more frequently it is due to a well defined fear that absence from home will result in loss of patronage and a corresponding gain by some confrere or "competitor" whose success it is desired shall not be increased. Less often the busy physician refrains from treating himself to a well earned rest because he believes that he cannot afford it. Not one of these reasons is worthy of serious consideration. The opportunity always comes when it is made, and in justice to himself every physician should select the most favorable time for a rest and then let nothing of an ordinary nature interfere with his plans. Fear of loss of patronage is a confession of weakness in ability to hold patronage, for he who feels himself competent to treat his patients intelligently and fairly need have no fear of permanent and irretrievable loss as a result of an occasional absence from home while taking needed rest and recreation. The plea that a vacation cannot be afforded is also unworthy of serious consideration for a vacation, in order to be productive of the most good, need not require the expenditure of any considerable amount of money. In fact it is generally the case that an inexpensive vacation is the most beneficial, for he who would economize generally goes to the quieter resorts or perhaps adopts camp life in the woods near ocean, lake or stream, thereby gaining the greatest benefit at the least expenditure of money. If the physician who thinks he cannot afford the expense of a vacation will exert himself during a period of thirty days in attempts to collect in part or whole many of his accounts against delinquent

debtors he will soon discover that he has not only enough money to meet all current bills, but a surplus which may with profit be used in paying the expenses of a vacation. Even a little economy during the year ought to be all that is necessary in order to give a balance that may be used for the necessary expenses of a vacation. And what a great amount of good comes from a short period of rest and recreation. The physical and mental powers are refreshed and stimulated, and the physician returns to his work with renewed interest and enthusiasm which invariably shows itself in the increased quantity and quality of service rendered his patients. No man can do justice to himself or those with whom he comes in contact if he permits his energies and enthusiasm for work to wane, and there is no surer way of unfitting a man to cope with the wide-awake world about him than to deprive him of the privilege of an occasional change of occupation and scene such as comes with a real vacation, and this is as true of the medical man as any one else. The busy physician should take for vacation purposes at least two to four weeks out of each year, and during the time set aside for such purpose he should not only get away from his practice, but he should free his mind entirely of things medical. His time may be pleasantly and profitably spent in travel, hunting, fishing, or any other pursuit which strikes his fancy, but it should take him and his mind away from his accustomed work. Most city physicians are in the habit of taking a rest during one of the summer months, but the physicians of the smaller towns and villages should also adopt the policy, for they need the tonic effect of rest and change of scene as much as their city brothers. We therefore urge our readers, the majority of whom belong to the former class, to get into the habit of regularly taking a vacation. Once begun, the benefits derived will lead you to follow the practice as a regular feature.

A. E. B., Jr.

ORIGINAL ARTICLES

No paper published or to be published elsewhere as original
will be accepted in this department.

A Note on Appendicitis.

BY

DR. BYRON ROBINSON,
Chicago.

Quite a number of years ago in operating for appendicitis I observed cases in which perforative symptoms were marked, but during the operation and subsequently with the aid of a lens no appendicular perforation could be found. Distinctly visible peritonitis existed adjacent to the appendix. At first I thought some mistake had occurred in diagnosis but case after case arose under similar conditions until I had finally concluded that the facts were the following:

Endoappendicitis or catarrhal appendicitis had existed for some time, as noted in the history of such cases, and a fine pin point perforation of the appendix had occurred, allowing a limited escape of bacterial infection. A short time later the appendicular perforation became occluded through blood clot, debris, exudate or through the peritoneal or muscular coats of the appendix sliding or overlapping the perforation and closing it. The violent disordered and vigorous, appendicular peristalsis could easily shift the coats of the appendix so that the muscular or peritoneal coats would overlap and close like a valve the perforation. Dr. Lucy Waite called me in consultation in a case of appendicitis in a nurse years ago who had been afflicted for a year with vague pains in the right iliac fossa. It was agreed to be a typical case of appendicitis and Dr. Lucy Waite operated. At the operation an area of peritonitis, sunset red, of the dimension of a saucer was plainly visible. On examining the appendix after removal the most minute observation could not detect a perforation, yet it was a typical case of appendicitis with intense adjacent appendicular peritonitis. Other physicians had related similar conditions and asked my opinion. I am convinced that the cases are those of fine pin point perforations in the appendix which rapidly close but allow sufficient bacterial invasion to produce typical peritonitis. All such subjects would recover without operation but no diagnostician has sufficient acumen to foresee the condition.

In the literature of appendicitis, which now forms a stately library, I have so far been unable to find any mention of this form of appendicitis.

The Medico-Legal Aspect of Insanity.

BY
DR. W. P. WHERY,
Fort Wayne, Ind.

This paper is not on insanity in general, but only on its medico-legal aspects. Modern science has modified older conceptions of insanity, and the courts have always been disposed to accommodate their rulings to the changes that advancing knowledge involves.

In ancient times an insane person was believed to be possessed by the devil, and insanity was classed as something supernatural. This crude but terrible superstition accounted for some of the severities with which the patients were treated. It has left a definite impression on the popular mind that is not yet irradiated, causing the insane to be regarded as entirely different from other sick persons, and causing the courts to treat their civil rights in an exceptional manner. However since the obsessional theory has been abandoned there is reason to hope that other misconceptions surrounding this subject, may, in the light of medical science, be cleared away.

The term insanity, or unsoundness, implies disease, and might as well apply to the body as to the mind, but general usage has restricted it to the latter. There was, in former times, a mistaken notion that mind belonged to the soul instead of the body, and that mental disorders did not fall into the same category with corporeal diseases. This is why the hospitals for the insane were designated *Asylums*, as if the only thing to be done for them was to place them in isolation—equivalent to their civil death and burial. But now we have no doubt that physical disease is somatic and that its treatment should be in an ordinary hospital.

Another misconception that has not quite disappeared is that a person if once insane is always insane. In other words, an attack of insanity is supposed to taint the patient for life, and this taint is even extended to his offspring and to his collateral relatives. As a matter of fact a wife or nurse or physician in frequent attendance on an insane patient is liable to become insane also. This is not because insanity is a communicable disease but because the attendant's mental condition was unstable and easily unbalanced by constant observation of the patient. In this way a doctor who frequently prescribes narcotics is liable to become a morphine fiend himself, or anyone who frequents the company of hard drinkers may turn out to be a drunkard. These effects are the natural consequences of a

previously existing morbid mental inequilibrium in the subject affected.

What the law does to an insane person is, in these days, much more merciful than their treatment in the old Bedlams. But even yet they are subjected to a severity beyond that awarded to a patient afflicted with small pox or leprosy.

They are in many instances judged to be of unsound mind by inexperienced medical examiners, taken forcibly to an asylum or special hospital, there detained and disciplined like a criminal, deprived of most of their civil rights and, practically, of all their property, and eventually, if discharged "cured," are liable at any future time to have the fact of insanity brought up against them, either to prevent their freedom of action or as a defense if they are charged with crime.

The scientific idea of insanity is that it is a disease, due to disease of the cells of the brain. The mind is a function of the nervous system. Mental disorder is nervous disorder. And psychology is only a department of general physiology. Like many other diseases insanity has an incubative period when the brain disease exists but has not yet manifested itself by symptoms; but some severe and continuous mental strain or some sudden great nervous shock may develop the latent disease into a pronounced case of insanity.

Following from these statements the treatment of insanity belongs to therapeutics in general. And the special purpose of this paper is to impress on all who may be engaged in medico-legal cases the importance of adopting a sane and scientific view of the question of insanity.

Insanity is a group of symptoms of cerebral disease characterized by perversion in some degree of the mental faculties. Disease or defect of the brain may be congenital and conduce to insanity; but we do not recognize such a thing as congenital insanity. As nothing can be pronounced "dead" which has never been alive, so no one can be insane who has not previously been sane. Insanity is a change and a loss of the normal status. This is the conventional acceptance of the term insanity, and it is, of course, much narrower than the scientific definition.

The grey cells of the brain are probably the most remarkable particles of matter in the universe. They have several most important functions. For instance, a motor function, directing the movements of the voluntary muscles; a sensory function, presiding over general tactile sensation; functions of special sense, enabling us to

smell, taste, hear and see; and the mental function, the chief of them all. The symptom complex that we designate "insanity" is the indication of disease of the grey cells of the brain. Such disease may be temporary and of brief duration. It may be intermittent like malaria. It may be irregularly recurrent like gout or rheumatism. It may manifest itself in different patients in a variety of ways like the many phases of dyspepsia. It may be incurable like the malignant disorders. And it may be completely cured in favorable cases.

All our actions—and these include the words we utter—are due to the energy of our nervous system. Everything that we do or say is caused by the operation of the nerves. Whether a deed be intentional or unintended it is always a consequence of nervous energy. There are three causes or impulses of our acts: sense impressions, that lead to reflex action; emotional or instinctive impulses; and intelligent or rational impulses. Reflex actions can seldom be controlled by the mind. Sneezing from irritation of the Schneiderian membrane, laughing when we are tickled, crying out when we are hurt or surprised, and such like are examples of actions with which the mind has but little to do. For the purpose of this discussion the mind may be said to consist of the intelligence or reason and the emotional or instincts of feelings or passions. Ribot in his well-known work, refers to diseases of the consciousness or personality and diseases of the will. But we may leave the will out of consideration here, because it is the servant of the intelligent or emotional impulses of the mind. Volition and consciousness are mental modes of action, while intelligence and emotion are essential elements or faculties of the mind. Very many of our actions are due to emotional or intelligent impulses and inclinations, and most of our actions are legally correct. But occasionally there is an emotional impulse to do some act that is forbidden by law or custom. Here, the reason may interfere and prevent the illegal action. The reason or intellect often controls, or exhibits, the impulse of the emotions. This is the ordinary course of sane minds. But the intellect itself may conceive and plan an illegal act, and it is sometimes prevented from accomplishing it by the resistance offered by the instinctive impulses. Thus, a guilty motive may be held back from translation into criminal action by such emotions as fear, pride, pity, or habitual propriety. This is the way in which intelligence and emotion form a perfect equilibrium in sane minds. Sanity, of course, is not synonymous with proper and legal conduct.

The greatest criminals are sane. It is not true that criminals are always degenerates. But sanity always predicates perfect self-control and the discrimination of right from wrong. As insanity is often alleged as a defense against a criminal charge, we should consider whether it is a valid defense and why it should be so. It is an accepted axiom that only responsible agents can be guilty of crime and amenable to punishment. The plea of insanity therefor is equivalent to the claim of irresponsibility. This plea is based on the syllogism that every insane person is irresponsible, that John Doe is insane, and therefore he is irresponsible and immune. It is often sufficient to prove a malfactor insane to establish the conclusion that he should not be convicted or punished. But it is partly the object of my paper to combat such a conclusion as this.

The method taken to prove a man insane is often to show that he is eccentric in his speech or actions, that his self-control or his intelligence is defective, that he has delusions and tendencies to go wrong, that he is dangerous to himself or others, that he has become changed from his former or normal self, and that certain symptoms of morbid mentality have presented themselves in his case. It is not necessary that the patient should be "raving mad" with acute mania and delirium, or that he should become totally demented as in general paralysis. Many persons are insane in a slight degree. Many that are thought sane are subject to a latent insanity that may break forth unexpectedly. Many are hovering on the borderland of insanity but never cross it. No hard and fast line of demarkation can be drawn between sanity and insanity so as to fit all cases. We have read that "great wits to madness often are allied." Some of the most famous personages in history have been crazy or epileptics. Suicides are often very unjustly pronounced insane. And several distinct symptoms of brain disease, such as amnesia, aphasia, and so forth, may co-exist with insanity, and yet by themselves do not prove that the patient presenting them is ipso facto insane. Finally, idiocy and imbecility are excluded from the definition of insanity. But, in practice, a single symptom of alienism is enough for the examiner who has a suspected patient's liberty in his hands. Then the unwarranted inference is drawn that he is insane, and the unwarranted implication is added that once or at any time insane he is always insane and irresponsible.

Now from the earliest times it was noticed that insane persons are not always in the same mental conditions. That is, that insanity is generally paroxysmal. They were called "lunatics" because the

insane paroxysm coincided, as was supposed, with lunation. Even acute mania has intervals of remission. In the popular phrase the insane have lucid intervals. Monomaniacs are not insane, it is believed, on all subjects. Then we hear of emotional insanity as a contrast to intellectual insanity, suggesting that reason is subjected to passion. And all these distinctions of insanity lead to the conclusion that the patients may be only partially insane or only occasionally insane, and temporary insanity is a common term to express this view.

This is the popular, and perhaps the legal, conception of insanity. It is held that a person who has ever been adjudged insane may become temporarily insane at a specified moment, and that he may have lucid intervals of any length during which he is sane. If he commits a crime, especially a very atrocious one, it is to be taken as a recurrence of insanity, and he is therefore irresponsible. An inmate of an asylum remarked to the doctor, "If I kill you, I shall not be punished for it, for you know I am insane."

I want here to repeat that insanity is not separable from physical defect. It is a disease of the brain. It is a disease of the material part of the patient, and affects his mentality because the mind is a function of the brain. Insanity is to be diagnosed like all other diseases. Sometimes, like digestive ailments, diagnosed by the symptoms, and sometimes we can prove by an autopsy the exact nature and extent of the cerebral disorder. If the brain be inflamed or pressed on by a tumor, the mind is affected. Consciousness may be lost, perverted thinking or feeling may be induced, acute mania may be a resultant. In other words some degree of mental disorder or insanity, may be due to the brain disease. Mental disorder then may be congenital or acquired. The brain may not be developed or may become accidentally diseased. In either case there is abnormal mentality. And like other diseases, brain diseases are often curable, and with the cure the insanity that results from them disappears.

Most insane people are quite capable of knowing right from wrong. Some people seem to have no moral sense, but this is generally a result of parental neglect. The development of a conscience is one of the most important objects of a religious education. If the insane person once knew right from wrong he will know it after he has been adjudged insane. The insane are also capable of exercising self-control. The discipline of every asylum is based on this fact. By fear or favor the patients are kept in order, just as we

manage young children. They sometimes plan crimes with great ingenuity and effect them with extraordinary cunning. The fact of malice aforethought in their case is incontestable. Though they often commit emotional crimes in a paroxysm of passion, yet they know very well what they are about. People in the same way may disorder their brains with drugs like alcohol, cannabis indica, morphine and various loco plants. They are in the same condition as regards self-control and knowledge of right and wrong as are the insane during a paroxysm.

There is often in our minds a confusion of thought between insanity and anarchy. Anarchy is a revolt against rule or law. Anarchy may be political, social, intellectual, or emotional. All social animals are governed by law—customary or statutory. Bees, wild geese, cattle—for instance, have customary rules of action in relation to each other. We often have very wrong ideas about savages. They are not anarchists, free from all law and customary rule. On the contrary even the lowest tribes have very strict regulations for all usual contingencies, and the individual gets nervous and alarmed when he does not know what to do and is without guidance. Civilized men are rarely bound as strictly as savages, and among the former anarchy abounds. We naturally respect authority and instinctively obey. All business, as well as that of war, is carried on under discipline by definite rules. Even children in their games invent a set of rules to govern them. There are some persons always violating rules and defying laws. They have a strong individuality and revolt against social ties. These are not insane although eccentric. They are anarchists, and we have them always with us. They often seem that ethical considerations have no application to them. For the safety of the law-abiding people these anarchial persons have often to be restrained of their liberty or punished. In a great many ways the social anarchist and the insane act similarly and from like motives. But the criterion to distinguish them is the presence of cerebral disease.

Everyone will admit that the same anarchist is punishable for crime. But is the insane crime-perpetrator to be treated with impunity? It seems to me that he is not irresponsible. He is not to be exempted from punishment because he is partially or temporarily insane. It would be for the advantage of the community if insane murderers, for instance, were to be punished—the insanity to be pleaded in mitigation. Every case of crime committed by an insane patient should be investigated as if his responsibility were to be

taken for granted until it is in the special case disproved. And the notion that the insane are irresponsible should no longer be retained.

Prophylaxis and Hygiene of the Exanthematous Diseases.*

BY

DR. C. A. WOODRUFF,
Ligonier, Ind.;

The importance of prophylaxis and hygiene in the exanthematous diseases is brought more forcibly to the attention of the physician than the health officer. The latter stands between the public and danger, his duty being to keep the disease within the smallest possible compass. The physician holds the strategic position, and upon him must fall the chief responsibility in this field. The family physician of today should be not only a therapist but more essentially a teacher and a guide. Indeed the public is hungering and thirsting for practical medical knowledge and readily turns to the medical profession for the desired information. There is no doubt but that there exists, stored away in our books and journals, a mass of vitally useful knowledge which if turned into active channels would be of immense value to mankind. People often seem careless of their own welfare and resent the application of what to us are obviously beneficial measures. This they do not because their interests are precious, but because they have not had ready access to our fund of knowledge and therefore do not appreciate the conditions. This in a measure is due to the fault of the medical profession in making but little attempt to educate the public. Physicians as a rule are ready and willing to pass the good things along but at times need urging, especially in regard to sanitary facts. We see the doctor of olden days busy with his herbs and decoctions, giving heed only to the cure of humors and the like and leaving prevention and sanitation to those gods of fate who it was thought presided over men's destinies and determined the outcome of the struggle between health and disease. The physician of the future will have his chief usefulness as a teacher and apostle of hygiene and prophylaxis in addition to being skilled in diagnosis and treatment.

Prophylaxis as applied to the exanthemata has become if not the most important, the most interesting item in the consideration of these diseases. Etiology will never take its rightful place until some patient investigator has demonstrated the causative factors. Of all the exanthemata small pox alone has its conqueror. Vaccination will prevent it, or modify its severity, and as a prophylactic only the blindly ignorant would refuse to use it. It is in short the

*Read before the Noble County Medical Society, January 3, 1905, and referred to the Fort Wayne Medical Journal-Magazine for publication.

only certainty in sight, and it has been demonstrated beyond question that by means of it small pox may be controlled. The importance of early isolation of any suspicious case cannot be ignored. One is not safe in awaiting absolute certainty before quarantining the subject, for at times the progress of the disease is our only means of settling the diagnosis. Meanwhile to allow unreserved liberty to the patient and those he has come in contact with is little short of criminal.

In scarletina, rubeola, rubella and varicella we must depend almost wholly upon prophylaxis and hygiene. We hear these diseases spoken of as essentially the diseases of childhood, as if they were necessary evils, which of course is false. As physicians we see much need of instruction among parents and others whose belief seems to be that the child belongs to this or that disease, the disease to the child, and nothing should be done to keep them apart. Many children have been deliberately exposed with the belief that everyone must have these diseases at some time, the sooner the better—another fallacy which is gradually disappearing. Not so long ago scarlet fever was regarded in this very way, but of late years there has been an awakening. Scarlet fever cases now yield gracefully to quarantine because the danger is apparent. Not so with measles, however, for it is thought by many intelligent people that measles are perfectly harmless if the disease does not “strike in.” One who attempts to establish quarantine in these cases sees this very plainly, in fact it is the cause for much opposition from the families affected. As a matter of fact, rubeola is one of the most dangerous in this group, standing next to scarletina as a cause of death in children. 106 children died from this harmless (?) disease in Indiana in 1903, and over 400 died of broncho-pneumonia and other sequellae. Over 1000 children were distinctly injured for life by the disease. Mastoid abscesses and deafness, weakened eyesight, catarrh, digestive disorders, and above all, that dragon, consumption, are to be feared. The mildest appearing case may result in death or ill health for the remainder of life. We who know that measles is not without its terrors should see that each and every case is surrounded by ample precautions. Varicella and rubella, as in the case of measles and scarlet fever, we do not consider as necessary to childhood, nor need I consider them further here.

In the prophylaxis of this group of diseases we must depend largely upon isolation of the patient and a quarantine sufficiently rigid to render further spread of the disease unlikely. After every

case of variola, scarletina and rubeola, thorough disinfection of the patient, his clothing and of the premises, should be practiced.

The part which hygiene plays in the management of the exanthemata, as has been said, is of the greatest importance. Here we also find ourselves up against dense ignorance on the part of a majority of the people. Personal hygiene, extending to the care of the body, diet, water supply, etc., is today demanding increased attention. The public is more exacting than ever before in these matters, but still much instruction is needed. In the treatment of disease we are expected to prescribe medicine in some form, though frequently the patient really needs no medicine but more care in the diet and hygienic conditions affecting the patient. Simple, plain, but timely advice may often avert serious consequences. In these infectious diseases some hygienic measures are obviously necessary. We enter the sick room and find it hot and stuffy, filled with the so-called "characteristic odor" of the disease which nine times in ten would disappear by simply opening a window. Direct draughts of course should be avoided, but let the patient have an abundance of pure and fresh out door air and plenty of pure water. These cost nothing but are priceless. In many instances there seems no possible excuse for the unsanitary condition in which the patient is found. It requires but little effort to have the surroundings clean, no matter how poor the family may be, and many a child suffering from one of the exanthematous diseases would make a quicker and better recovery if given no other attention than supplied with a clean bed in a clean room, given plain but clean foods, and supplied with an abundance of pure air and pure water. Not only this, but the child would be happier amid such surroundings and under such conditions.

Parents frequently urge the immediate return of the child to school as soon as apparently recovered from one of the exanthematous diseases. This we know is wrong, and is bad both for the school and for the child. Bad for the child because unnecessarily early strain is put upon the eyes, besides the danger from too early exposure,—and bad for the school because infection is occasionally carried through lack of care in disinfection, resulting in other children being exposed to the disease. In short the patient being at liberty our watchfulness should not cease, for though we may think the danger practically over, the unexpected is forever happening. We therefore need the hearty co-operation of the family—a thing which we will have and gladly when once the people are taught the necessity for things which now seem to them unnecessary if not absurd.

SOCIETY PROCEEDINGS

Fort Wayne Medical Society.

Meeting of March 14, 1905.—Meeting called to order in the Assembly room of the Court House, by President Drayer, with thirty-five members and guests present. Minutes of previous meeting were read and approved.

CLINICAL CASES: Case I. "A Case of Bilateral Dislocation of the Cervical Vertebrae, with Recovery of the Patient" was reported by Dr. Chas. Barnett, and patient exhibited. The patient, a little boy ten years of age, was run over by a buggy last October and when examined shortly afterward was found to have an anterior bilateral dislocation forward of the sixth cervical vertebral. Paralysis of both upper extremities was complete. The head was flexed on the chest, the muscles being perfectly flaccid. The depression left by the spinous process and the body of the process could be felt distinctly. Strong extension and counter extension was made by pressure in front and the body of the vertebra was pushed back into its proper position. This was comparatively easy because the transverse and articular processes did not on account of the lack of ossification interfere. (Complete ossification occurs about the 25th year.) The head and neck were kept in a sand splint for a period of six weeks. The head was immobile for several weeks after the splints were removed. Massage and gentle manipulation finally resulted in perfect use of the head and neck. Doctor Barnett said that bilateral dislocation of the cervical vertebrae with recovery was a rarity, and he cited the oft-quoted and celebrated Ayer's case of bilateral dislocation of the fifth cervical vertebra as proof. He attributed his success to the immediate reduction, and the age of the patient. He also reported in this connection two cases of unilateral dislocation of the cervical vertebra with complete recovery in both cases.

Dr. H. A. Duemling, in discussing the case, said that he had just read in one of the late medical journals of a case of fracture of the odontoid process of the cervical vertebra. (Discovered on post-mortem.) Following the accident the patient had gotten up and walked a considerable distance, when upon suddenly changing his position death ensued. He said we frequently fail to recognize these fractures of the vertebrae, and that the case reported by Dr. Barnett was therefore of more than usual interest.

Case II. Dr. E. E. Morgan presented a case for diagnosis. (Patient exhibited.) The patient, a girl, aged ten, gave a history of probable scarlet fever two years before, and typhoid fever one year later. During the latter sickness the urine became very scanty. Three weeks ago the present condition of the patient came on suddenly and has remained practically the same ever since. At the time the manifestation started, and ever since, the patient has been feeling perfectly well, with bowels and kidneys acting normally, and upon examination presented nothing abnormal. The cheeks are symmetrically red, tumified and slightly oedematous. There is no itching or burning, and the child does not complain in any way of inconvenience or discomfort. The lesions are also present on the extensor surfaces of the arms and flexor surfaces of the legs.

After examining the patient Dr. Porter said that he thought the lesion was probably a papular eczema, inasmuch as there has been a slight exfoliation with drying of the skin.

Dr. H. A. Duemling said that he did not think it could be an eczema as there had been no itching or weeping.

Dr. L. P. Drayer said that in his judgment the case was not one of eczema, but an acne rosacea dependent upon an acidosis. He said he thought the condition would be relieved by a bland diet and plenty of diuretics. The lesion is a catarrhal inflammation of the skin.

Case III. A case of "Paget's Disease of the Nipple" was reported by Dr. H. A. Duemling. The nipple presented a glazed surface. Nodules were found following the cords and extending to the axil-

lary space. The gland was removed and the lymphatics in the axillary space were found very hard.

Case IV. A case of "Atresia of the Anus" was reported by Dr. H. A. Duemling. A Polish child, 17 months old, presented a peculiar anal orifice near the scrotum, which from its unnatural appearance attracted the attention of the parents, as also the difficulty with which the child's bowels were moved. It was necessary to give ten or twenty injections before a movement of the bowels could be secured. By introducing the finger into the rectum a dense ring was found which constructed the orifice. This was divided, and following operation the bowels moved without difficulty. The ultimate result of the operation is still a question.

Case V. A case of "Intra-cranial Hemorrhage with Compression Symptoms" was reported by Dr. H. A. Duemling. The patient, a man, thirty-five years of age, fell four or five feet and struck the ground with the buttocks, the head striking a log. The patient was stunned and rendered unconscious, but soon got up and walked. Gradually through the afternoon, following the accident, the ability of the patient to articulate grew less, and at the end of five or six hours was entirely gone. When seen by Dr. Duemling the man was quite intelligent and apparently all right except for the bruises on the right side of the head and inability to talk. Temperature normal, pulse 45. There was a suspicion of facial paralysis of the right side. A diagnosis of hemorrhage on the left side of the brain in Broca's convolution was made. The skull was opened in the left frontal area. The dura was found normal with pulsations faint but present. When the dura was opened there was immediately a bulging of the pulpified brain tissue and clots the largest being the size of a split pea. A cat-gut drain was put in and the wound closed. For 24 hours the patient did not utter a sound, but at the end of 48 hours he articulated and spoke well.

PAPERS: "Diagnosis of Position in Pregnancy" was the title of a paper given by Dr. Wm. Enslin. He said that attitude and position go hand in hand, and spoke of the value of external exam-

ination by palpation, percussion, and osculation in determining diagnosis. He thought the external examination should be more often practiced and the examination per vagina deferred whenever possible. When made, the examination per vagina should be under strict aseptic precautions.

"Face Presentations" was the title of a paper by Dr. E. E. Morgan. He said that this form of presentation was one of the most difficult obstetric problems, and fortunately it is not so frequently met with, as it occurs only about once in every 300 births. Every face presentation is probably originally a vertex then a brow, and is conferred into a face presentation by the extension of the vertex at the beginning of labor. The condition may be brought about by an abnormal shape of the head, or an abnormal uterus, or the uterus may not lie even in the abdomen, or lie to one side. Small tumors in or about the rim of the pelvis may retard the progress of the vertex, producing the same effect that a deformity of the pelvis might. The diagnosis may be made either by abdominal or vaginal examinations. The location of the fetal limbs and heart are the important land marks to be found by abdominal examination. On vaginal examination the chin of the foetus is the important land-mark. He gave the means of delivery and mechanism of this presentation, and referred to the use of forceps and the indication for the use of same. He said that prognosis in face presentation is worse than a vertex for both mother and child. A small per cent of the cases are terminated rapidly and safely by nature, but most of them need assistance, and the delivery may be very difficult.

"The Essentials of Treatment of Acute Inflammation of the Middle Ear," was the title of a paper presented by Dr. Albert E. Bulson, Jr., in which he advocated the recognition of the gravity of every ear-ache, and adoption of proper treatment. He said that every acute inflammation of the middle ear is essentially a surgical disease, and should be considered as such. In the early history of the trouble free catharsis and heat applied to the ear may relieve. Coupled with this may be advantageously used the local applica-

tion to the ear drum of a ten percent carbolic acid solution in glycerine. With the development of diffuse redness of the tympanum, even without bulging, free incision of the drum membrane is indicated. He thought it inadvisable to wait for bulging, as often times the unyielding drum membrane causes extension of the infection to the mastoid or neighboring vital parts, when if the drum membrane had been earlier opened the infection would be thoroughly evacuated. He quoted statistics of his own as well as others showing good results from early incision in causing early recovery of the patient with good hearing and prevention of mastoid complications.

Dr. K. K. Wheelock opened the discussion on Doctor Bulson's paper by saying that he agreed entirely with all the statements made in the paper, but would add that in children where inflammation by Politzeration will not be tolerated, the Siegel suction otoscope is often of value in drawing out the retracted drum membrane, as also affecting the withdrawing of the mucus in those cases where there is perforation and discharge. The careful examination of as also the incision of the drum membrane in children should be performed under a general anaesthetic. In adults the use of 25% solution of carbolic acid and menthol will produce sufficient anaesthesia of the drum membrane to effect incision with comparatively little pain. The solution should be very delicately applied to only that portion of the drum membrane which is to be incised. Doctor Wheelock said he agreed with the speaker that early opening of the drum membrane will save many cases from protracted suppuration, adhesive changes in the sound conducting apparatus, and intra-cranial complications through extension of the infection.

Dr. S. H. Havice said that the paper was practical, for it emphasized the importance of giving these cases early attention. He thought too little attention was paid to the question of rest. Aside from the ordinary treatment usually applied in these cases he deemed it wise to keep the patient in bed until the active inflammation has subsided. In addition to the attention given the ear, the nose and throat should receive such medication as indicated. He questioned the advisability of removing spurs and adenoids in the presence of acute middle ear inflammation.

Dr. Bulson closed the discussion by saying that if adenoids exist it was almost impossible to effect an early and complete cure of the middle ear trouble unless the adenoids are removed, and he did not

believe that the operation properly performed is contraindicated, as the adenoids are already a hot-bed of infection and their removal will not add to the trouble. As an indication of the rapidity with which serious complications may follow the middle ear trouble, he reported one of his cases upon which he performed a mastoid operation four days after the initial symptoms of an acute middle ear inflammation. The drum membrane was opened when it was congested and not bulging, and at that time there were mild symptoms of mastoid involvement. Notwithstanding the active abortive treatment, the mastoid complication increased, and upon operation the antrum and mastoid cells were found not only full of pus but the site of a carious process. Infection was found to be streptococcic.

In the discussion of the papers on obstetrics Dr. M. F. Porter said that it was not always possible to make an accurate diagnosis of presentation, as occasionally a deformed child prevented the recognition of any diagnostic features of presentation. In this connection he reported a case in which he made during the course of labor three different diagnoses, only to find on delivery that the foetus was an acephalic monster.

Dr. S. H. Havice reported a case in which the bowels of the foetus were exposed, and in one or two other instances that he could recall, diagnosis of position was difficult from malformation of the foetus. He said that he had had two shoulder presentations in primipara.

Dr. B. Van Sweringen said that abdominal palpation is not used as much as it should be, and a great deal of information as to position can be obtained by ascertaining where motion is felt. In face presentation if the motion is felt on the right side and high up, we usually have a left presentation. He said that a vaginal examination had as a rule given him but little more information than he had derived from abdominal palpation. He thought that Caesarian section was warranted in difficult cases of chin presentations. In mento-posterior presentations it is absolutely impossible for the foetus to be born unless the position is corrected.

Dr. E. J. McOscar said that every case of labor is a case unto itself, and no hard and fast rules can be laid down which will apply to every case. He considered anaesthesia one of the important factors in labor, as it made delivery easier, as well as saved the mother unnecessary and prolonged pain.

Dr. H. A. Duemling said that he had had one case of acephalic monster which made it impossible for him to form any conclusion

as to position. Before the membranes were ruptured he felt points which he thought were fingers but which later proved to be protuberances covered with hair. He said that he had also had one case of spina bifida with a distinct decubitus.

Dr. L. P. Drayer said that he thought every obstetrician ought to make a diagnosis of position from abdominal palpation and osculation, but that the diagnosis should be confirmed by vaginal examination.

Dr. M. F. Porter said that it was reported that the so-called Harrington solution No. 9 would destroy the ordinary staphylococcus in ten seconds. If so the solution was satisfactory as an antiseptic agent. The solution is as follows:

Commercial alcohol	640 c. c.
Hydrochloric acid	60 c. c.
Water	300 c. c.
Corrosive sublimate	0.8

The Board of Censors reported on the application of Dr. L. E. Brown saying that they knew nothing against Doctor Brown except that it was reported that he was doing contract work. Following some discussion the application was voted upon and Doctor Brown was elected a member of the Society. Following the election Doctor Brown stated that while he had been doing contract work at one time he had not for several months engaged in that practice, and would hereafter refuse to do any contract work.

The application of Dr. L. R. Fast of Paulding, Ohio, was laid on the table pending the adoption of an amendment to the by-laws permitting the acceptance of non-resident members.

Dr. K. K. Wheelock offered a motion, which was amended and passed, to the effect that a committee of five, of which the President of the Society and the county and city health officers be members, be appointed to confer with the city and county officials with reference to the location and plans for a new isolation hospital.

The president appointed Drs. Bulson, Sweringen and Weaver to arrange for the medico-legal night at the Fort Wayne Club.

Dr. M. F. Porter made a motion, that was duly carried, that the Fort Wayne Medical Society send word to Doctor W. H. Myers that they had heard with regret of his illness, and wished for him a speedy recovery. It was also moved that the communication be accompanied with flowers.

Adjourned.

J. C. WALLACE, Sec'y.



NEWS NOTES *and* COMMENTS



The Portland Meeting of the American Medical Association.

The greatest gathering of medical men ever held west of the Rocky Mountains, and one of the greatest gatherings ever held anywhere, will be that during the Lewis and Clark Exposition at Portland, Oregon, when the American Medical Association will meet in convention. It is expected that at least 2500 doctors will attend, and that these will bring with them their wives, families, and guests, to the number of 5000 more. The session of the Association will be held from July 11 to July 14, inclusive.

Dr. J. A. K. Mackenzie and other local physicians associated with him have organized the work of preparing for the visitors, and the plans already formed provide for a number of most attractive features. Social entertainments will be on a large and elaborate scale. Trips up and down the Columbia River, where the scenery rivals any in the world, are among these. To enable delegates to appreciate thoroughly the river scenery, it has been arranged to hold one day's session on barges, which will be hauled by steamer down the Willamette river, a distance of eleven miles, to the Columbia, and then for a considerable distance up that world-famous stream. Facilities for such an excursion are of the best, the river steamers being powerful and safe, and the barges fitted with every arrangement for the comfort of tourists.

The general sessions of the body will be held at the Exposition grounds, in Festival Hall, a building erected especially for such purposes, and other meetings will be held at various places throughout the city. The various sections of the Association—medical, gynecology, surgery and anatomy, obstetrics, ophthalmology, diseases of children, nervous and mental diseases, cutaneous medicine and surgery, laryngology, otology, materia medica, pharmacy and therapeutics, pathology and physiology—will be provided with suitable separate accommodations. A special meeting place will be furnished the house of delegates, consisting of 100 or more members, who will transact the business affairs of the body.

Arrangements are being made for rooms and board for the visiting medical men, and no difficulty is anticipated in securing suitable accommodations. Portland is amply provided with scores of first

class hotels and hundreds of family boarding houses. Besides these the houses of Portlanders will be thrown open for the accommodation of visitors. A hotel within the grounds will accommodate 600.

The railroad companies are lending assistance to the Lewis and Clark Fair project with an enthusiasm that has not characterized their attitude toward earlier expositions, and have provided lower rates from distant points than were ever before offered for a similar event. Under the schedule already made out, a person living in the Mississippi Valley may come to Portland and return for \$45. The rate for the round trip is \$52.50 from St. Louis and \$56.50 from Chicago, and one fare from points farther east. The tickets sold will be good for ninety days, and will provide almost unlimited stop-over privileges, thus making the chance to see the country as great an attraction to the tourists as the Exposition itself. Yellowstone Park may be visited at small expense, and arrangements have been perfected whereby a person may go one way by one of the northern routes and the other by way of California. Up and down the Columbia the scenery is magnificent, and there are many places of historical interest well worth visiting. A large number of handsome and comfortable river steamers will make regular trips to these points during the Exposition period from June 1 to October 15.

***Review of the Report of the Anaemia Commission Upon
Hookworm Disease in Porto Rico.***

In February, 1904, the United States Government appointed a Commission for the study and treatment of anaemia in Porto Rico. This Commission has now submitted its report to the governor of that Island. This report covers over 200 pages, and is printed both in the Spanish and in the English language.

The Commission was composed of experts in their special field, and the amount of work accomplished by these gentlemen, and the exceedingly painstaking manner in which they attended to every detail of the subject, stamps this inquiry as one of the most scientific and thorough investigations ever undertaken in the cause of public health.

As early as 1899, Dr. Bailey K. Ashford, who later became a member of this Commission discovered the parasite *ankylostoma* in the feces of anaemia patients who were then crowding the field hospitals of Ponce. This was the first positive evidence that the disease in Porto Rico known as *anaemia*, was not the ordinary form, but *anky-*

lostomiasis or *uncinariasis*, produced by the parasite sucking the blood, and so prevalent did this disease become during the ensuing years that fully ninety per cent. of the population became affected.

When the Commission appointed by the United States Government began its investigation in Porto Rico, it established a hospital consisting of tent-wards, first at Bayamon, and later at Utuado, the most anaemic districts of the Island. The object of the treatment was first to remove the parasite, and then to cure the anaemia.

To kill the parasite, thymol, malefern, and betanaphthol were given, but the preference was for thymol. First the patient received a purge of salts, and then on the following day he was made to fast until one o'clock, and then was given thymol in doses not exceeding four grammes; then another purge was given to remove the bodies of the parasites killed with the antiseptic. The purpose of the first purge was to clean the intestines of mucus, etc., so as to allow the thymol to act. The thymol and purge treatment was continued once a week until the feces showed no more *uncinaria*.

While thymol kills the parasite and the purges remove them from the intestines, also diminishing the amount of toxins in the system, these remedies only clear the field for a reconstructive process in the blood which is needful to restore to health the extremely anaemic patient.

Iron was given in the severe cases of anaemia. Pepto-Mangan (Gude) was the only proprietary remedy reported by the Commission, the other remedies used being pharmacopoeial preparations. That over eighteen pages of the report should be devoted to cases treated with Pepto-Mangan, proves the high regard in which the Commission hold this preparation.

The eighteen cases in which the Commission used Pepto-Mangan (Gude) in the treatment of *uncinariasis*, were selected on account of their extreme severity, and thus these cases represent the most crucial test to which iron preparations can be subjected. The results obtained with this treatment were extremely gratifying. In nearly all of the cases we find such notes as these: "Excellent condition. Completely cured, etc.," while the difference between the low percentage of haemoglobin (some cases showing only 11%) and the low count of the red cells at the beginning of treatment with Pepto-Mangan, and the nearly normal findings at the conclusion, affords convincing proof of the efficacy of the medication.

A noteworthy fact is that none of the patients showed any digestive disturbances after the administration of Pepto-Mangan, although

the remedy was used for many weeks in each case. When we remember the extremely low state in which most of these patients were found on admission, and the fact that several suffered from gastro-intestinal symptoms incident to their disease, this detail is by no means to be underestimated.

MEDICAL REVIEWS

Department of Medicine and Therapeutics

In Charge of **George W. McCaskey, A. M., M. D.**
Professor of Clinical Medicine in the Fort Wayne College of Medicine, Ft. Wayne, Ind.

The Curability of Epilepsy.

Wherry, on this subject in the *Journal of Nervous and Mental Diseases* for May 1905, says "that there are so few recoveries in epilepsy is due to the following reasons, namely:—

1. An insufficient knowledge of the real conditions present.
2. Treatment of the convulsion, instead of the epileptic condition as understood.
3. Treating epileptics en masse, instead of individually.
4. Treatment postponed until disease becomes well-established.
5. Limited provision for special care and treatment.

In spite of all this, however, it is gratifying, as well as inspiring, to know that epilepsy, instead of being an incurable disease, has, under the most favorable circumstances, shown a schedule of recoveries in excess of some other diseases and which in the future will be made much larger. Recoveries in epilepsy reported by recent writers are: Hothnagel, 5 per cent; Laehr, 6 per cent.; Ackerman, 7.6 per cent.; Wildermuth, 8.5 per cent.; Dana, 5 per cent. to 10 per cent.; Turner, 10.2 per cent.; Habermaas, 10.3 per cent.; Alt, 12.5 per cent. I do not wish to be regarded as over-sanguine, nor do I make the statement without due consideration, based upon some experience but I have every reason to believe that individualization of treatment in epilepsy, with change in environment, will result in doubling the percentage of recoveries already obtained, and that the final result may again be doubled by a judicious selection of cases. The treatment of epilepsy is really in its infancy. We have been seeking a specific for convulsions, and the majority of the drugs used in the past years have borne no more relation to the epileptic condition than the coal tar products bear to typhoid fever. We have since

learned that the rise in temperature is not the most dangerous thing in typhoid fever; that it is but a symptom of the disease. We have also learned, or are learning, that the convulsion is but a symptom of the epileptic condition, and that the coal tar antipyretics are no more objectionable in typhoid fever than antispasmodics in epilepsy. More than this, we are learning that under proper treatment epilepsy is curable, and will become more and more so as hospitals for the special treatment of epilepsy multiply.

Chronic Gastritis.

Faber, in *Hospitalstidende*, Copenhagen, has been studying the anatomic findings in the stomach from 40 cases of chronic gastritis and in scraps obtained through the stomach tube in 20 other cases. Aside from the cancer cases, he has encountered 10 cases of achylia, and in all of these there were evidences of decided gastritis as also in 10 other cases of achylia in which the condition was determined from scraps brought up by the stomach tube. His experience has demonstrated the possibility of the existence of achylia without entire destruction of the glands, but that is always accompanied by gastritis. In fact, the diminished secretory functioning is a manifestation of gastritis, but probably both are due to the same cause, usually an ulcer. Their action is antagonistic, on the whole, as the gastritis, when it obtains the upper hand, leads to achylia. The latter may persist long after the gastritis has subsided. His clinical experience with 44 cases of gastritis during the last year and a half seems to indicate that the affection passes through three phases: 1, increased production of mucus with normal secretion; 2, production of mucus with hypochylia, and 3, achylia. In the first phase, the infiltration is more pronounced and deeper; in the third, it is extensive and diffuse with more or less atrophy. The gastritis frequently runs a latent course; sometimes nervous symptoms predominate, in other cases intestinal symptoms, diarrhoea. The latent cases are those which have been erroneously designated as "nervous hypochylia or achylia." Nervous achylia is possible, but has not been demonstrated to date. In six or seven of his series of 44 cases and in a number of others in his private practice the gastritis was latent and the nervous symptoms predominated, the manifestations of dyspepsia being so slight as to be overlooked. One symptom liable to mask the gastritis in such cases is the vertigo e stomacho laeso which may come on after meals without a trace of other dyspeptic disturbances. Other cases may present symptoms characteristic of neuras-

thenia, but in reality due to chronic gastritis. True hysteric symptoms may also be superposed on a chronic gastritis, as he has had occasion to witness in a number of cases. Repeated examination of the functional capacity of the stomach will reveal the underlying gastritis in many of these puzzling cases. Secondary, hemotagenic gastritis may develop after intestinal troubles or after acute infectious diseases. Primary gastritis is generally the result of imperfectly masticated or irritating food. He found defective in 33 out of his 44 cases. In 7 of his patients, chronic abuse of alcohol was evidently a prominent factor, but he has frequently found the stomach apparently normal in persons extremely addicted to the use of liquor. The gastritis in other cases was due to abuse of laxatives, to pyorrhoea alveolaris, to the use of chewing tobacco or to gastrop-tosis, but in a number of patients no cause could be determined. The discussion on Faber's article follows in No. 39 of the Tidende.—*Jour. A. M. A.*

DEPARTMENT OF SURGERY GYNAECOLOGY and OBSTETRICS

In Charge of Miles F. Porter, A. M., M. D.
Professor of Surgery and Gynæcology in the Fort Wayne College of Medicine,

Criminal Abortion.

In a symposium upon this subject presented to the Nebraska State Med. Asso. (*Western Med. Review*, March 1905,) under the heading, "Ethics of Criminal Abortion" occurs the following from the pen of Dr. Ely:

As for the too fecund woman who bears children with a frequency that undermines her health, she is so infrequent a phenomenon in these modern times as to call for no consideration. The plain facts in the case are that it is not so much the too fecund that call upon the doctor for relief as it is the woman with a single child, or none at all. The most frequent suppliant upon our grace is the society or club woman; she who has a vocation outside the limits of her family, and to whom a child would become a hindrance in her "work," when it is not the young woman sent away from home to make a "career" or to learn a trade that will "emancipate" her from the tyranny of man. Here is the bonanza for the abortionist. The

"emancipators of women" are accomplishing their mission no doubt, but at what a terrible price in lost chastity!

Speaking of the "Social Causes of Abortion" Dr. Philbrick says that an inordinate and perverted sex instinct resulting from woman's economic dependence is responsible for the increase in this crime. The changed social conditions have caused the later generations to substitute foeticide for infanticide (female).

"Limitation of the number of offspring is often a duty but foeticide is not its ethical method." Speaking of the agencies which must be enlisted in opposition to this evil he refers to the evident degeneracy of the public press as follows:

"A generation is still with us that knew the American press in the day of its greatness, its dignified and ardent championship of moral issues, when through its columns leaders forged a path direct to the heart of the masses. Today we may well bow in humiliation at the transformation fifty years has wrought: a press which is either a capitalistic enterprise or the register of a party machine; whose editorials are made, not felt, to meet the exigencies of financial control; the bulk of its matter pandering to the lowest taste of its constituency; its expense largely borne by a mass of advertisements of doubtful character or positive immorality."

The chief responsibility for the prevalence of criminal abortion is placed upon the medical profession and in the elevation of the profession lies the greatest hope for the amelioration of this crime.

Alcohol in Carbolic Poisoning.

C. V. Burke believes that the general teaching concerning carbolic acid poisoning is erroneous. In the first place, the prognosis is much more unfavorable than generally considered. In 12 cases he has seen but two recoveries. The ordinarily recommended antidote magnesium or sodium sulphate, he says, is useless. On the other hand alcohol is of great value. A stomach tube should be passed and the stomach washed out with diluted whiskey.—*Therapeutic Review.*

Drainage per Vagina.

W. D. Haggard describes (*Jour. A. M. A.*, May 27, 1905,) a very simple and safe way of establishing gauze drainage through the vagina after abdominal operations. He recounts the well-known objections to the methods in vogue to overcome which his method was devised. The abdominal operation being finished the gauze is packed in the cul-de-sac, the omentum replaced, the abdomen closed. Now the

vagina is cleansed, the uterus pulled down with volsella and the fornix is opened by cutting with scissors directly on to the gauze, after which the gauze is drawn into the vagina and pinned to a strip of iodoform gauze with which the vagina is subsequently packed. The simplicity of the method and the security it gives against infection are its chief merits.

Prostatectomy on the Aged.

Freyer has done his operation on 10 patients past 79 years of age (*London Lancet*, Feb. 25). Nine of them are living in good health and excellent bladder function. He concludes that age is no bar to the operation provided the health aside from the prostatic trouble is fair. That the kidneys are adequate is especially important. These patients need careful nursing and constant attention of the surgeon during convalescence.

DEPARTMENT OF MATERIA MEDICA, THERAPEUTICS AND PEDIATRICS

In Charge of Budd Van Sweringen, M. D.

Professor of Theory and Practice of Medicine and Clinical Medicine in the Fort Wayne College of Medicine.

Cotarnine Hydrochloride in Uterine Bleeding.

H. J. Boldt, (*N. Y. Med. Jour.*, Feb. 25, '05) contributes the result of seven years experience with cotarnine hydrochloride in uterine bleeding.

The drug is a fractionation product of the oxidation of narcotine, an alkaloid obtained from opium, and is a microcrystalline, yellow powder, soluble in water. Chemically it differs from hydrastinine only in the substitution of the methoxyl group OCH_3 for one atom of displaced hydrogen.

The following is a resume of its physiological action:

1. In cold and warm blooded animals it produces paralysis by its action on the motor sphere of the spinal cord. In the warm blooded animals a complete paralysis occurs late, usually only shortly before death.
2. A mild narcotic state, but neither sleep nor complete narcosis, is produced in warm blooded animals by its action on the cerebrum.
3. In rabbits and dogs by both internal and subcutaneous adminis-

tration, it is productive of intestinal paralysis and fæcal evacuations.

4. It has no direct primary influence in warm blooded animals on the heart, circulatory system, or blood pressure. The effects on the heart, pulse, and blood pressure are of secondary nature, through the influence of cotarnine on respiration; only in very large doses, and with long continued artificial respiration is a weakened heart action produced.

5. Its action on the respiratory centre after transitory irritation is paralytic; respiration, is therefore, increased at first, but subsequently rapidly sinks to a quietus.

6. Fatal termination is produced by paralysis of the respiratory centre, but can at any time be kept in abeyance by artificial respiration.

It has been used in the bleeding of fibroids, post-puerperal bleeding, eudometritis, bleeding during pregnancy, profuse menstruation in virgins and a typical bleeding during the climacteric.

It has no oxytotic properties and therefore can properly be used during pregnancy.

The dose in profuse menstruation is usually one grain three times a day, begun a week before the expected period. When menstruation appears it may be doubled.

In case of necessity 5 grains may be given hypodermically and repeated in several hours. If no effect is obtained from the third dose, it is useless to use it further.

Treatment of Hemorrhoids by the General Practitioner.

T. Chittenden Hill, (*Boston Med. and Surg. Jour.*, Feb. 4, '05), says the general practitioner should be able to treat successfully the more common rectal diseases. Hemorrhoids is the most common of these affections. Of the external variety but two forms are common, viz.: The thrombotic, and the external connective-tissue hemorrhoid. A thrombotic hemorrhoid is an extravasation of blood at the anal margin beneath the skin covering the external sphincter and extending slightly into the anal canal. Treatment consists in injecting a 1% solution of eucain hypodermically as follows: With left index finger and thumb pinch the perianal skin to numb the part, and insert the needle superficially just under the skin; the whole of the top of the tumor is well injected, then transfix with bistoury and cut outward; pack firmly with iodoform gauze, which should remain in place for 24 hours. Healing is rapid and cure is complete. Connective-tissue hemorrhoids are simply redundant folds of perianal and anal skin, caused by stretching by large fecal masses. Overstretching causes

slight tearing and infection; this subsiding, the folds do not contract to their normal size. These become inflamed and constitute this variety of piles. When actually inflamed and the external sphincter is not hypertrophied palliative treatment is best. This consists in bathing and drying, then wipe with cotton wet with olive oil, and use ointment composed of the following: Zinc oxid, 2 dr.; camphor liniment, 4 dr.; vaseline, 1 oz. Apply at night, and dust during day with powder composed of: Zinc oxid, 4dr.; pulverized camphor, 2 dr.; powdered starch, 10 dr. After acute symptoms have subsided, the skin tags may be removed under local anesthesia, with scissors. Should the external sphincter be hypertrophied or ulcer complicate the situation more radical treatment may be justified. The great majority of internal hemorrhoids can be treated successfully in the physician's office. Hill sends not more than 10% of private patients afflicted with internal hemorrhoids to a hospital. Grant, of New York, has reported 126 instances in which he used hypodermic injections of sterile water as a local anesthetic previous to operating on internal hemorrhoids. Of these 116 were by ligature, 6 by incision and 4 by clamp and cautery. It must be remembered that the after-treatment in all cases requires care and strict attention. The bowels should be confined for 48 hours, after which there should be daily evacuation. A pad of cotton-wool wrung out of 1 to 1,000 mercuric chlorid should be worn over the anal orifice. Extreme pain, which is rare, can be relieved by opium suppositories, cocain, etc.—*Am. Med.*

DEPARTMENT OF OPHTHALMOLOGY OTOLOGY, LARYNGOLOGY & RHINOLOGY

In Charge of Albert E. Bulson, Jr., B. S., M. D.

Oculist and Aurist for St. Vincent's Orphan Asylum, the Allen County Orphan Asylum and the U. S. Pension Bureau for Northern Indiana and Northern Ohio; Professor of Ophthalmology in the Fort Wayne College of Medicine, Fort Wayne, Indiana.

Intratracheal Injections.

J. W. Gleitsmann gives a historical resume of the development of this method of medication which he considers deserves more attention than has been accorded it. Judgment in the selection of cases is necessary, however, and though the method is useful in alleviating the dry cough in the beginning stage of pulmonary tuberculosis, and may at a later stage favorably modify the putrid secretions in this disease, a cure is not to be expected from the procedure *per se*. In

bronchiectasis the injections are almost specific, and many, but not all, cases of asthma can be relieved in this way. Intratracheal injections are not to be recommended in acute inflammatory conditions, but they are most efficient in chronic tracheitis and bronchitis, while tracheal syphilis has been cured and fetid pulmonary gangrene has been favorably influenced. The vehicle should be a bland purified oil to which may be added menthol in the proportion of one to fifteen per cent., guaiacol, and creosote carbonate from one to two per cent. etc. The laryngeal mirror is essential to the proper introduction of the canula which is preferably made of hard rubber and is used in connection with the Hartmann ear syringe, holding one ounce.—*Medical Record*, March 25, 1905.

Some Ophthalmic Suggestions.

R. Kalish points out some popular fallacies in regard to diseases of the eye, which he says are often the cause of serious injury to the visual power. Among these is the senseless outcry against the wearing of glasses by the young, the belief that squint in young children should go untreated, as they will outgrow it, and especially what the author terms the self-fitting of glasses in the establishment of opticians. The victims in these places are allowed themselves to select the glasses that seem to "fit," and not twenty per cent. of such eyes are accurately corrected as to the refractive error, and sooner or later it is discovered that serious damage has been done. Much emphasis is laid by the author on the broad rule that glasses should never be ordered without an ophthalmoscopic examination. Instances are cited in which glasses obtained from opticians were wholly unsuitable and did positive harm.—*Medical Record*, June 3, 1905.

The Size of the Pupil as an Aid to Diagnosis.

J. T. Duncan, according to the *Medical Council*, gives this classification:

A. Pupils may be evenly contracted. This may indicate: (1) locomotor ataxia, (2) meningitis and encaphalitis (early stages), (3) chronic inflammation, cervical cord, (4) apoplexy of pons, (5) epileptic fits (early), (6) uremia, (7) tobacco amblyopia, (8) retinitis (9) opium poisoning, (10) use of myotics.

B. Pupils may be evenly dilated: (1) paralysis of both third nerves (post-diphtheritic), (2) intracranial tumors (late), (3) intracranial effusions, (4) irritation cervical sympathetic, (5) acute inflammation, cervical cord, (6) premonitory of locomotor ataxia, (7) after

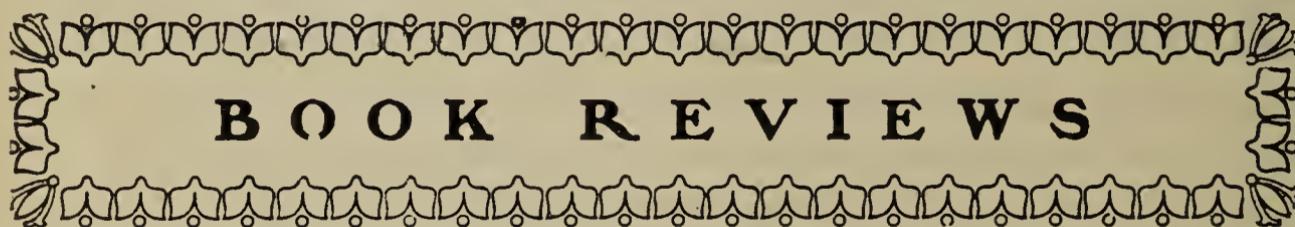
epileptic fits, (8) cataracts, (9) amaurosis, (10) acute mania or melancholia, (11) mydriatics.

c. Pupils may be unequal, then we suspect: (1) locomotor ataxia, (2) general paralysis of insane, (3) unilateral lesion of third or sympathetic nerve, (4) pain in branch of fifth nerve, (5) old iritis, (6) carotid aneurism or tumor of neck, (7) use of a myotic or mydriatic in one eye, (8) unilateral cranial lesion, (9) acute glaucoma (unilateral).

I. The pupils are contracted and fixed: In list A we exclude uremia, meningitis and encephalitis, retinitis, tobacco amblyopia. The remaining conditions can be differentially diagnosed.

II. Pupils are evenly dilated and fixed: Rare. Present in (1) amaurosis, (2) use of mydriatic, (3) complete paralysis of both third nerves.

III. Pupils are uneven but fixed: This usually points to locomotor ataxia or general paralysis of insane.



B O O K R E V I E W S

Gray's Anatomy.—Messrs. Lea Brothers & Co. have pleasure in announcing a new edition of Gray's Anatomy, to be published about midsummer, and embodying nearly two years of labor on the part of the editor, J. Chambers DaCosta, M. D., of Philadelphia, and a corps of special assistants.

Commensurately with the importance of the largest selling medical work ever published, this new edition will present a revision so thorough and searching that the entire book has been reset in new type.

The illustrations have come in for their fair share of the general revision, so that at this writing more than 400 new and elaborate engravings in black and colors have been prepared. "GRAY" has always been noted for its richness of illustration, but the new edition far exceeds anything that has hitherto been attempted.

A Text-Book on Physiology.—By Isaac Ott, A. M., M. D., Professor of Physiology in the Medico-Chirurgical College of Philadelphia. With 137 illustrations. Royal Octavo, 563 pages. Bound in Extra Cloth. Price, \$3.00 net. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia, Pa.

This volume presents the elementary facts of physiology in a simple and plain manner well adapted to the use of the general practitioner and student. The rapidly widening demand of physiology in consequence of original research and investigation along many lines has

long since made it impossible to present a comprehensive treatise within the compass of a single octavo volume. Nevertheless such volumes are essential, and by confining the treatment of the subject to the principal facts and avoiding all contraversal topics, it is quite possible to present, as the author has done, a fairly complete resume of the entire subject. One does not look in vain for reflections of the most recent research, such for instance as the histological changes produced by fatigue upon nerve cells, and the latest inquiries into osmotic pressure so important in various chemical interchanges of the body.

The chapter on the circulation is especially satisfactory, and here as elsewhere the author directs attention to the pathological additions of the various organs and functions. This is an especially commendable feature of this book and one that makes it especially valuable to the practitioner. The work is cordially recommended as a useful addition to the already somewhat lengthy list of general treatises upon physiology.

G. W. McC.

Hollis' Epitome of Medical Diagnosis.—A Manual for Students and Physicians. By Austin W. Hollis, M. D., Attending Physician to St. Luke's Hospital; to the New York Dispensary, etc. In one 12mo volume of 319 pages, with 13 illustrations. Cloth, \$1.00 net. Lea Brothers & Co., Publishers, Philadelphia and New York, 1905.

To one who wants to review the essential facts concerning diseases usually treated of in works of practice, this little volume should prove very useful. It can be carried about and read at odd moments.

B. VANS.

Gynecology, Medical and Surgical.—Outlines for Students and Practitioners. By Henry J. Garrigues, A. M., M. D. Philadelphia and London. J. B. Lippincott Company. 1905.

As the title indicates this book is especially intended for students and practitioners and not for gynecologists. Hence special stress is laid upon such treatment, including operations, as the general practitioner is likely to undertake. Following this idea the first chapter defines gynecology and speaks of the pronunciation of the word, the next treats of puberty and the climateric, the next of etiology in general, the next of examinations in general the next of bloody discharge of the genitals and the next of mucous discharge from the genitals. This completes this general division of the work and is followed by a special division in which the various diseases of the female genital organs are discussed in order commencing with the vulva and ending with diseases of the pelvis under which latter

heading is included diseases of the pelvic peritoneum, ligaments of the uterus, connective tissue, etc.

A very interesting chapter on sterility follows, after which deformities and diseases of the female urinary organs (barring the kidneys) and deformities and diseases of the rectum and anus are discussed.

The author's style is plain and terse, the book is profusely illustrated and well indexed. The publisher's work is well done. It would be hard to imagine a work that would more fully and satisfactorily meet the objects aimed at in its publication. M. F. P.

International Clinics.—Volume I, Fifteenth Series, 1905. J. B. Lippincott Company, Publishers, Philadelphia.

This volume fully sustains the good reputation achieved by its predecessors.

It is needless to review the papers it contains, individually. They are all written by good men entitled by experience to speak authoritatively. B. VANS.

Arneill's Epitome of Clinical Diagnosis and Urinalysis.—A Manual for Students and Practitioners. By James R. Arneill, A. B., M. D., Professor of Medicine and Clinical Medicine in the University of Colorado, Physician to the County Hospital and to St. Joseph's Hospital, Denver. In one 12mo. volume of 244 pages, with 79 engravings and a colored plate. Cloth, \$1.00 net. Lea Brothers & Co., Publishers, Philadelphia and New York, 1905.

This little book contains most of the well known methods of examining blood, sputum, urine, stomach contents and feces. The accounts are short and yet they are "working formulae."

It is very convenient when on the hunt for some method or formula to have it in full in a book of this size. B. VANS.

International Medical Annual.—1905. A Year Book of Treatment and Practitioner's Index. Twenty-third year. E. B. Treat & Co., Publishers, New York. Price, \$3.00.

Treat's Annual is now so well and favorably known that it is unnecessary to say more than that the present issue is better in every respect than its predecessors. It has been enlarged in size of pages as well as number of pages.

The purchaser of this work obviates the necessity of binding journals, and reference to it is many times easier than reference to bound copies of weeklies. It is also more satisfactory because the article sought is abstracted and time is thus often saved at no sacrifice of detail or exactness.

Fort Wayne Medical Journal-Magazine

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EDITORIALS

The Surgical Treatment of Tuberculous Peritonitis.

"Careful study of recent literature warrants the conclusion that most observers still believe that laparotomy has a legitimate place in the treatment of tuberculous peritonitis if the disease is not too far advanced. Nor is it established that laparotomy per se is dangerous unless it is done too late. Most clinicians agree that to wait for spontaneous recovery, which is very uncertain, is to expose the patient to dissemination of the tuberculosis and thus allow the favorable moment for operation to pass. Recent statistics show that the ultimate results after surgical treatment are better than after so-called conservative treatment. Tuberculous peritonitis is a symptomatic condition, due to a primary focus of infection in the uterine appendages, appendix, intestines or mesenteric glands. This focus

of infection should be removed whenever it can be done without unduly breaking up adhesions or if section can be made in healthy tissues. Relapses following laparotomy are frequently due to non-removal of the focus of infection, which then acts as a source of reinfection. This is convincingly pointed out in a masterly address on the subject by William J. Mayo (*Journal of American Medical Association*, April 15, 1905), whose wide experience enables him to speak with authority. In St. Mary's Hospital, Rochester, Minn., in a period of ten years, there have been 6,408 abdominal operations performed. Of this number 184 were for some variety of abdominal tuberculosis, and of these 89 were cases of tuberculous peritonitis, with 3 deaths. Many of these patients returned several times with a relapse of the peritoneal condition or some other form of tuberculosis. It became evident that tuberculous peritonitis in the large majority of women was secondary to lupus of the mucous membrane of the fallopian tube, and if the latter was not removed it would surely act as a source of reinfection. By patience and care they were able to enucleate tuberculous tubes in 26 cases of tuberculous peritonitis, with 25 recoveries. Whereas 7 of these patients had been operated on by simple laparotomy one to four times previously, not one of them had to be operated on after removal of the tubes. The good results obtained in these cases are very striking, and fully sustain the conclusion that the treatment of tuberculous peritonitis should embrace not only the treatment of the peritonitis, which is symptomatic, but the removal of the source of infection as well, which, in the majority of cases, will be found in the uterine adnexa, appendix, intestines or mesenteric glands."

The above extract from an editorial in the *New York State Journal of Medicine* for June unquestionably represents the consensus of surgical opinion on this subject. The writer in a paper on the same subject read before the A. M. A. at Saratoga, N. Y., in 1902, said "tubercular foci, if accessible and not too numerous, should be removed." This statement was based upon a careful study of the literature, coupled with an experience in 12 cases. Subsequent experience, coupled with the experience of other operators, has not only confirmed me in this opinion, but has lead to the belief that hitherto operators have not made as strenuous efforts to remove local foci in operating for tuberculous peritonitis as should have been made. As to the statement of Mayo that tuberculosis of the peritoneum in women is secondary to lupus of the mucosa of the tubes in a large majority of cases, it must be said that it is not in accord

with the majority of other observers, but coming from one who has had so large an experience and is so careful an observer it should carry great weight and lead to further observations along this line by other operators.

M. F. P.

The Journal of the A. M. A. and Its Critics.

Until recently one quite frequently heard criticisms of the character of the advertisements published in the *Journal of The A. M. A.* These critics held that the *Journal* should hold close to the ethical line in this matter. We never thought the *Journal* so far wrong in this direction as did some of these critics, and yet we thought there was much room for improvement. Such improvement has been going on for a number of years until now it has reached, not perfection, because the *Journal* is run by doctors, and doctors being human, are therefore not perfect, but as high a plane as that occupied by any medical journal in the world. Now, some of these same critics are howling out of the "other corner of their mouths." In other words it seems to be a case of being "damned if you do," and "damned if you don't." This being the case, will, we opine, make no difference with those in whose hands the management of the *Journal* rests, but they will, in the future as in the past, go on doing all in their power to make the *Journal of the American Medical Association* the best publication of its kind in existence. In this effort they will have the support of all members of the A. M. A. who have the best interest of the profession at heart.*

M. F. P.

C O R R E S P O N D E N C E

The Fort Wayne Meeting of the Northern Tri-State Medical Association.

ELKHART, IND., June 22, 1905.

Editor Fort Wayne Medical Journal Magazine, Fort Wayne, Ind.

DEAR DOCTOR:—The Northern Tri-State Medical Association meeting at Fort Wayne, June 15, was indeed a success; at least it should be so considered if one can judge by the compliments of the visiting physicians. The committee on arrangements, with you as chairman, deserves the thanks of the Society for its most excellent

work. The good literary program was important and a strong "drawing card," but I feel that the efforts of the committee, the sociability and the hospitality of the Fort Wayne medical profession had very much to do in making the meeting a success, and as ex-president, I desire to thank the committee and the Fort Wayne medical profession for the entertainment and pleasure afforded to all the visiting physicians. Some offices are positions of honor, with no labor attached thereto. Others are positions of labor which should have honor attached thereto. The latter is the position of a committeeman. Some physicians can creditably fill an office in a medical society, but the number is small who are a success on a committee. To have a successful meeting it is essential to have a good working committee on arrangement, with a chairman who is a fine organizer and a hard worker, and it has been observed by various members of the Northern Tri-State Medical Association that a good program, with a wide-awake and hard working arrangement committee has always resulted in a large and profitable meeting. The Fort Wayne meeting is proof of the assertion.

I am thankful to the society for the honor that was bestowed upon me by twice electing me to the presidency. There was some hard work connected with the office, yet it was a labor that I enjoyed. It gave me much pleasure to see our Society grow larger and stronger each meeting, for during the past two years we have increased our membership about one hundred, and we have adopted a new constitution and by-laws that are practically the same as those of our state and national societies.

There is complete harmony in the Association because it is not controlled by politics or cliques. In this society the physicians from the city, from the country town, and the country cross-roads all meet on the same social and professional plane. The doctor of experience may come to the meetings as a teacher, the beginner as a pupil, yet it is a post-graduate for both. The barrier of formality and coldness is pushed aside with a whole-souled hand shake and a "how do you do" that comes from the heart. This is, indeed, a medical society for the "country doctor" as well as the "city doctor." By remaining loyal to the Association and our fellow physicians this good feeling will continue. Instead of sneering at our weaker brother let us educate him into the Northern Tri-State Medical Association. All physicians need the benefits derived from good medical societies. If our membership continues to increase year by year as it has in the past, in five years we can have an attendance

of five hundred instead of two hundred, (the attendance at the last meeting). In ten years we can be a power in the three states that will attract the attention of all classes.

The question has often been asked, "Why is the attendance so small at the meetings of the various State Medical Societies?" With the large membership there should be at least three times the usual attendance. Our Indiana State Medical Association, when it meets at Winona in 1906, should have an attendance of twelve hundred, and I sincerely believe that if the officers and committee on arrangements will work together with zeal this attendance can be reached.

The Northern Tri-State Medical Association has reached a plane where the program committee can select a program instead of begging essayists to appear on the program. At the last meeting all the applicants could not be accommodated. Papers read before the society have, as a rule, been well prepared. If essayists would read their papers before their county societies, have them criticized, and then re-write them for the Northern Tri-State Medical Association, no poor papers would be presented. Papers should not only show thought and investigation but they should be seasoned as much as possible with clinical experience.

Medical programs usually have two classes of essayists. One views it from the commercial aspect, the other from an educational standpoint. The one feels that he honors the society by appearing on the program, and he expects to have patients sent him in return for his services. The other feels honored that he has the privilege to appear, and hopes to improve himself and advance the cause of medicine and surgery. Both do good work if their papers are comprehensive and practical. A good audience is a stimulus to a speaker. As the attendance of the Northern Tri-State Medical Association grows larger the program will become still better because "wide-awake" physicians will ask to appear on the programs when they are certain of a large audience.

I am ambitious to see this the best sectional medical society in the country. If every member will make a strenuous effort he can add at least one new name to our membership at the next meeting. With money in the treasury, with a good location for the next meeting, with excellent officers, with a good committee on arrangements, the meeting in January, 1906, at Detroit, should have an attendance of at least three hundred. Let the *Journal-Magazine* sing the song loud and clear, "Three Hundred at Detroit," and the goal will be reached.

Very faithfully, GEORGE W. SPOHN.

ORIGINAL ARTICLES

No paper published or to be published elsewhere as original
will be accepted in this department.

Electricity in the Diagnosis of Nervous Diseases.

BY

G. W. MCASKEY, A. M., M. D.,
Fort Wayne, Ind.

At a recent meeting of the Northern Tri-State Medical Society held in this city I presented a case for clinical study by request of the president. I selected for this purpose a case of degenerative lesion of the lower motor neurons, for the purpose, among other things, of demonstrating the value of electrical reactions in the diagnosis of nervous diseases. Remarks made to me after the demonstration convinced me that among the profession at large there existed but a very vague idea of the application of electricity for diagnostic purposes. It seemed to me, therefore, an opportune moment to present in a very brief manner an outline of electrodiagnosis, especially as applied to the peripheral motor nervous system.

It will be necessary as an essential preliminary to briefly state the main physiological phenomena which are manifested in the application of the different forms of electricity to the neuromuscular apparatus. We must recognize in the first place two distinct forms of electric "currents," namely, faradic and galvanic, the physiological features of which are utterly diverse. Without entering into any of the mooted questions concerning the ultimate nature of electricity which might easily challenge the commonplace phraseology which will here be used, it is sufficient to say that galvanism is a continuous flow of an electric "current" from the positive or copper electrode through conductors of some sort or another to the negative or zinc electrode of the same cell, between which may be interposed several cells arranged in like manner constituting what is called the battery. The direction is of course, the reverse of this within the cell.

The amount or dosage of galvanism is expressed in terms of certain units called amperes, but for medical use the ampere is divided in one thousand parts, each one known as a milliampere, and meters are so constructed as to measure the number of milliamperes from one up to the limit of clinical application, which is in the neighbor-

hood of 250 or 300 milliamperes. The dosage of galvanism in medical and biological literature is always expressed in units of milliamperes.

If a current of bearable quantity is passed through a nerve or muscle of a living subject, no motor phenomenon will occur while the current is actually flowing unless the dosage is excessive. The physiological phenomena in the application of galvanism, and which are of clinical interest and value, occur when the current is closed



and when it is broken, in other words, what is known sometimes as "make" and "break." They are usually expressed clinically as the closing and opening phenomena of galvanic reactions.

Another very important fact to be noted is the behavior of muscle and nerve with reference to the two poles of the galvanic current. The positive pole of the battery, or that one which is connected with the copper or carbon or negative plate when applied over the motor

points to the muscles, (that is, the point where the nerves enter,) gives rise to very different phenomena quantitatively from that which is obtained from a similar action of the negative pole. We find that if we begin with a very weak current and gradually increase that current, testing the nerve and muscle from time to time by opening and closing the circuit, and reversing the current so as to make the electrode at one time positive (anode) and at another negative (cathode) that we will get contractions in health in the following order: First, there will occur a contraction with the closure of the circuit with the cathode or negative pole; next will occur a contraction when the circuit is closed with the positive pole or anode; at about the same time, or a little later, a contraction will occur at the opening with the anode, and finally at the opening with the cathode, although this sometimes requires such a strong current as to be too painful for the patient to bear. The principle of galvanic diagnosis, stated in its simplest terms, is nothing more nor less than a change in the order of contraction above indicated, with a gradually increased quantity of current. If for instance we find that a contraction will occur at the closure with the anode with a weaker current than that which occurs at closure with the cathode this proves positively a disturbance in the nutrition and usually in the organic structure of the lower motor neurons, that is the cells of the anterior cornua of the spinal cord of the fibers which run from these to the muscles.

There are certain symbols used to record galvanic reactions which it is necessary to call attention to here. C. stands for the cathode or negative pole, and also for the closing of the circuit. A. signifies the anode or positive pole, and O. the opening of the circuit. We have then four combinations of these symbols omitting the frequently used letter C. as standing for contraction, as this can be understood. They are: C. C., cathodal closing contraction; C. O., cathodal opening contraction; A. C., anodal closing contraction; A. O., anodal opening contraction. It has been common practice to simply state that one contraction was greater than another by the usual geometrical symbol. It is better, however, to measure the current and state the number of milliamperes required to produce each of the four contractions above indicated.

In addition to the "reversal of formula" as the above alterations are called, we have either a lowering or increase of the galvanic excitability. That is to say a muscle will respond with less current

or require more than it should in health. These are called quantitative as distinguished from the qualitative changes last described.

The faradic current, which is really not a current at all, but a rapid succession of alternating impulses produced in wires running parallel, usually in coils, gives rise to phenomena apparently of a very different character, although when analyzed they are found to be ultimately dependent upon the same biological laws. When an electrode from the faradic battery is applied over a muscle, preferably the motor point above referred to, there occurs in health a response in the way of a quick contraction which continues so long as the so-called "current" flows, or until the nerve and muscle have been exhausted if it is kept up an inordinate length of time. In diseased conditions of that part of the nervous system now under consideration, namely, the lower motor neurons, we find several departures from this law. The contraction in health, it should be stated, is what is termed a tetanic contraction, that is to say it is a series of contractions so rapid that so far as can be determined by ordinary means, they are continuous. Of course, the continuity is only apparent and not real as such a thing as a continuous contraction of a muscle fiber is unknown. In the diseased condition just referred to the contraction may occur slowly instead of quickly, and this is one of the most important points. In health, it is instantaneous. In disease there is an appreciable interval of variable length between the application of the electrode and the visible contraction. Another phenomenon which may be presented in disease is that the contraction, instead of being apparently continuous or tetanic in character is intermittent and irregular even though the faradic current is uniform.

My purpose was only to present the matter in its barest outlines and if the general practitioner will carefully consider the points above mentioned, he will at least have a definite notion of the applicability of electricity to neuro-diagnosis. Not only so, but with the faradic battery, which is the one in common use among general practitioners, he can easily make comparisons between the contraction of a healthy muscle and one that is under suspicion, and get very distinct and definite information concerning the pathology of the case.

While this can be done with a very cheap battery, yet of course electrodiagnosis, to be utilized to its full extent, requires the best appliances that the manufacturers can produce. The battery which

I have found most serviceable is a chloride of silver dry cell battery an illustration of which is given herewith. This battery is not at all heavy, can be carried easily on consultation visits, has no fluid to spill, and can be instantly utilized for all the different modifications of electric currents necessary for electro-diagnosis, in all its aspects. By simply manipulating the various switches and interruptor the galvanic current can be used in any one of the methods above indicated with either pole and the current measured by the meter which can be thrown in and out of the circuit, and without changing the position of the electrodes in the least the faradic current can in like manner be passed through the nerve and muscle and the faradic response determined. As a matter of fact the faradic reaction is usually and should be determined first and is thought by many to be the most important.

Many cases of multiple neuritis and degenerative lesions of the lower motor neurons are allowed to go unrecognized or confused with lesions of other parts of the spinal cord. Attention to the simple facts above stated, therefore, would obviate many of these mistakes.

The Medical Expert.

BY

WILLIAM P. BREEN,
Of the Indiana Bar,
Fort Wayne, Ind.

I appreciate thoroughly the compliment of an invitation to speak before a body of professional gentlemen, and felicitate myself on the fact that I have the honor of being the first layman to speak in this distinguished presence.

I have found it extremely difficult to shape my ideas to a topic fit for an address to a gathering of learned and skilled men in a profession other than my own. I apprehend that what I say must have relation to medical jurisprudence, the application of the law to medical situations or to some phase of medicine or medical men, from the lawyer's standpoint. Any discourse upon dry legal principles, except in so far as they touch some position of interest to the surgeon or physician would, I conceive, be out of place. Lawyers meet the followers of Esculapius mainly in the forum. Occasionally the lot of the lawyer, like that of other unfortunates, constrains them, when in a recumbent position, in a bed-chamber, to be meek and lowly, in the face of the learning of the physician, or when on the

operating table to become resigned to the skill and the mercy of the surgeon.

At times we, dwelling in amity with our legal brethren, gaze with interested eye at the differences between medical men which reach the surface and disturb the otherwise placid stream of professional life.

The devotee of Blackstone catches in the forum in the acts and words of the follower of Hippocrates, suggestions that are worthy of deep thought and frank expression. From out these suggestions, I shall say a few words to you this evening, on the qualifications which should be found in the expert medical witness.

Today, the man who is licensed to practice medicine or surgery, is by this fact alone permitted, in the forensic arena, to hold himself forth as alienist, toxicologist, psychologist, anatomist, physiologist and imperious master of all the propositions of delicate judgment and exquisite skill in the whole medical and surgical domain. This system is wrong, and wherever the fault lies, you will be interested in making the assistance which flows from your profession to the administration of the law as thorough, as reliable and as complete as possible.

I maintain, therefore, that the medical expert should be educated, able to explain, honest and a specialist in the line in which inquiry is addressed to him.

The medical expert, who is called upon to impart the learning of his cult to the lay judge or the lay juror, should be educated. His thorough education should be a prerequisite and indispensable preliminary to his right to step upon the threshold of the study of medicine. I, personally, would have him a finished, college-bred man, but he should surely be able to speak and write English with some sort of appreciative acquaintance with grammar and composition; the lowest standard conceivable would embrace this modicum of education. How a man, without a good education, can expect to master the ponderous, vexingly technical phraseology of any medical text book or authority is to me an insoluble mystery. Men of alleged deep and varied medical learning have, on the witness stand, differentated the syphilitic stages as primary, secondary and "territorial."

How a man without any acquaintance with Latin can assume familiarity with the uses of the innumerable drugs, whose very names are in Latin, is to me an example of atrocious audacity. He

should at least have studied medicine at some reputable medical college, to the limit of its course, and his diploma should be an assurance that his studies had been pursued with intelligence and profit so that, so far as human observations could determine, he was possessed of a fair knowledge of the principles of medicine. This is the lowest standard by which the medical expert can be measured.

True, it is easy to conceal his lack of knowledge, so long as the physician flits in and out of the sick room, maintains solemn reticence, and by grave looks or other facial expressions, illumines the minds of his patient and his family as to the exact status of his illness, but, at some time he will be called upon to give testimony of his faith, though it never be until he takes a comfortable seat in the witness chair. On the witness stand, a place which few men can fill satisfactorily, the expert should be able to state and explain the propositions of medical science at hand, in an understandable manner. His function in court is to give to judge or jury the knowledge which he possesses. If his talk is intensely technical, furbished with long medical terms, unpronounceable and untranslatable by the average man, what impression does he produce on the minds of those who, with bated breath, are waiting for information, explanation and knowledge? What light does he pour into the forensic investigation? I have seen in a court room eminent professional men, in explaining the functions of the human body, or the relations of the human bones, which should have been interesting, become so technical in their talk as to afford no information whatever to inquiring minds, and reach no result, beyond putting jury, counsel and court in convulsions of laughter, of the reason for which he seemed utterly oblivious. The medical expert should ever bear in mind that he is called to impart knowledge, not to technical minds, but to the untechnical, to minds unlearned in his science or phraseology. The best witness I ever saw was Dr. John B. Murphy, of Chicago, who, on the stand in this city, when asked to describe the conditions of appendicitis and the operation for the removal of the appendix, for over an hour fascinated jury, counsel, court and bystanders by an explanation in plain language, which was understood by everyone within the hearing of his voice.

He should be honest, not alone able to know the truth when he finds it, but able and willing to tell it, and above all, adhere to it when he does tell it. It is true that medicine is not an exact science, but there are some principles which have become fixed and from

which the better sense of the profession will tolerate no deviation. The integrity of the expert should be as marked in his course on the witness stand as it would be in his action in treating a patient. Honesty should be a substantial, indispensable ingredient of the medical expert. In this country and age, nothing less could be demanded by the State from the medical witness.

An eminent court, speaking of the value of expert testimony, has said:

"No one has any title to respect as an expert, or has any right to give an opinion upon the stand, unless as his own opinion; and if he has not given the subject involved such careful and discriminating study as has resulted in the formation of a definite opinion, he has no business to give it. Such an opinion can only be safely formed or expressed by persons who have made the scientific questions involved matters of definite and intelligent study, and who have by such application made up their own minds. In doing so, it is their business to resort to such aids of reading and study as they have reason to believe contain the information they need. This will naturally include the literature of the subject. But if they have only taken trouble enough to find or suppose they find that certain authors say certain things, without further satisfying themselves how reliable such statements are, their own opinion must be of very moderate value, and whether correct or incorrect, cannot be fortified before a jury by statements of what those authors hold on the subject. The jury are only concerned to know what the witness thinks, and what capacity and judgment he shows to make his opinion worthy of respect."

The ordinary physician, engaged in ordinary, every-day practice, who, whenever a case of poisoning comes to him, sends it to a toxicologist, is surely not an expert fitted to tell what poison caused the death of a suicide whom he had never seen before. Have you the best evidence when you let such a witness tell the action and results of poison in a given case and make no effort to get the opinion of the expert in poisons? Is the oculist and aurist the proper expert to give an opinion on the sanity or insanity of a man or shall we gain this knowledge from the neurologist and alienist, whose experience and study have been devoted to mental troubles? Shall the man who never reduced a dislocation tell us of the propriety of the methods of reduction in preference to the surgeon whose studies and practice have put him in touch with many such cases?

The domain of your science is so broad that no argument is needed to demonstrate that the man who has made special study of certain affections and diseases and the parts of the human economy involved therein, and has confined his practice along these lines should be better able to describe to the world the causes, results and proper treatments in such cases than the general practitioner.

The law wants from you in all judicial investigations the best ability, the most accurate judgment and the widest knowledge, theoretical and practical, within your grasp. The medical profession elevates itself every time a physician or a surgeon takes the stand, who knows what he is talking about, is able to convey that knowledge to his listener, and, better than all, manfully adheres to the truth, as God gives him to know it.

In a crude, hasty way, I have sought to put to you a few promptings of thought which, in my opinion, make for the elevation of the medical expert, for the uplift of your profession, and for the better attainment of truth and justice, in the courts of our land.

Abstract of a Paper on Abdominal Crisis Caused by Meckel's Diverticulum.*

BY

MILES F. PORTER, A. M., M. D.,
Fort Wayne, Ind.

Within a period of a few months there occurred in my practice four cases of Meckel's diverticulum. In one the diverticulum caused no trouble, in the other three it was the occasion for the operation.

This paper is based upon this experience coupled with a study of reported cases (149) together with 35 cases hitherto unreported.

The chief object of the paper is to add to the practical aspect of the subject.

Meckel's diverticulum is a fetal remnant which should, but does not always disappear by a process of involution.

It is present in from one to two per cent. of all individuals.

It is the cause of intestinal obstruction in six per cent. of all cases.

When present it is a greater menace to life than is the appendix vermiformis.

Of the cases tabulated it caused obstruction by band in 101 cases, volvulus in 8 cases and intussusception in 20 cases. Diverticulitis was the cause of crisis in 17 cases, prolapse of the bowel in 2 cases,

*Read at the meeting of the American Medical Association, Portland, Oregon, July 10, 1905.

typhoid perforation in 5 cases, traumatic perforation in one and tubercular ulceration in 2 cases. The diverticulum was the cause of trouble in 20 cases. It is most frequently found in umbilical hernia.

One case of stricture of the gut caused by super-involution of Meckel's diverticulum is reported by Maylard.

Duplication of the gut may be caused by Meckel's diverticulum.

Cysts are rare but do occur, and may produce gangrene of the bowel by traction.

Illustrations are shown showing some of the numerous ways in which diverticula cause trouble.

Crisis caused by Meckel's diverticulum is most apt to manifest itself as bowel obstruction or peritonitis.

In 118 cases obstruction was complete and in 7 incomplete. In 17 cases there had been previous attacks of incomplete obstruction.

In one case (McArthur's) the appendix vermiformis was gangrenous because of strangulation due to Meckel's diverticulum acting as a band.

Diverticulitis is likely to be diagnosticated as appendicitis.

Trauma is probably a frequent cause of crisis due to Meckel's diverticulum.

Symptoms are not distinctive and a correct diagnosis is hardly possible nor is it necessary.

A working diagnosis can be and should be made early; mortality in these cases is extremely high and is due largely to delay in operating.

A Meckel's diverticulum when met with should be removed whether it is causing trouble or not.

It should be excised rather than inverted, using a purse-string or Lembert suture to close the opening owing to its size and relation to the gut.

The reports of 184 cases are appended to the paper.

***Paroövarian Cyst: Sinistro-Spiral Twist of Pedicle with
Strangulation: Operation: Recovery.***

BY
B. VAN SWERINGEN,
Fort Wayne, Ind.

The following case is reported for the purpose of illustrating the symptoms which follow strangulation of a cyst from torsion of the

pedicle, as well as to place another instance of this somewhat rare accident on record.

Miss B., 21 years of age, single, had never been in rugged health. Her parents were living and well. There is no hereditary predisposition. In the summer of 1904 she contracted a left sided pleurisy which was followed by a large effusion which was tapped and did not return. She recovered her health in due time and was about as usual.

For a number of years she has had pain or distress in the lower abdomen almost daily. At times she is seized with severe attacks of cramp which come on suddenly and leave as abruptly as they appear. They last a varying length of time, from a few minutes to an hour or longer. They have no apparent connection with the menstrual function but may occur at any time. Exercise, such as bicycle riding, has seemed to favor their occurrence.

She took her last attack about 9 a. m. of November 21, 1904, while out walking. The pain was severe and she was removed to her home, where I saw her at 1 p. m. At this time a globular tumor about the size of a cocoanut was to be felt in the left ovarian region. Her temperature and pulse were about normal and no effects of the left sided pleurisy were to be found.

A diagnosis of left ovarian cyst with torsion of the pedicle was made and immediate laparotomy advised, which was accepted.

With Drs. Drayer and McOscar assisting an incision was made in the linea alba two inches in length, the cyst brought up and evacuated until it could be delivered through the small opening. It was then found to spring from the right broad ligament and to be twisted on its pedicle almost two complete turns, the twist being to the left. The anterior cyst wall was dark from extravasation of blood. The strangulation had not been complete. The pedicle was ligated and the mass removed. The recovery was uneventful.

The contents of the cyst consisted of a clear limpid liquid not yet blood-stained. The interior of the cyst wall presented a few small papillomatous growths, and this together with the arrangement of the tube over the top of the cyst and the absence of involvement of the ovary prove it to be of parovarian origin, its development having taken place between the layers of the broad ligament.

SOCIETY PROCEEDINGS

The Northern Tri-State Medical Association.

The 32nd annual meeting of this Association was held in Fort Wayne on June 15th, and it proved to be the largest attended meeting in the history of the Association. There was probably an attendance of at least 250, as there were 175 physicians present at one time during the afternoon session, and it was reported that later many more entered the room.

The session opened with the presentation of clinical cases by Drs. M. I. Rosenthal, G. W. McCaskey and M. F. Porter, of Fort Wayne. This was followed by the following papers: "Early Diagnosis of Pulmonary Tuberculosis," Dr. R. R. Alwood, Montpelier, Ohio; "Purpura Hemorrhagica," Dr. B. Van Sweringen, Fort Wayne, Indiana; "Intestinal Obstruction," Dr. Chas. Stoltz, South Bend, Indiana; "Prostatectomy," Dr. Wm. J. Gillett, Toledo, Ohio; "How to Palpate the Kidney," C. D. Aaron, Detroit; "Some New Methods of Treating the Nephritis of Bright's Disease," A. C. Crofton, Chicago, Illinois; "Foreign Bodies in the Eye With Complications and Treatment," Albert E. Bulson, Jr., Fort Wayne, Indiana; "Gall Stones in Reference to Digestive Disturbances," L. Breisacher, Detroit, Michigan; "The Surgical Aspects of Syphilis," G. Frank Lydston, Chicago, Illinois. At the evening session, held in the Fort Wayne Club, the address of the evening was delivered by Dr. Nicholas Senn, of Chicago, his subject being "The Use of Iodine in Surgery," This highly scientific and scholarly address of an hour in length was listened to with rapt attention by the 200 physicians present, and was the close of a program of scientific treats which have not been equaled in the history of the organization. Following Doctor Senn's address the members and visitors were the guests of the Fort Wayne Medical profession, and were treated to a smoker luncheon, and a varied musicale of eight numbers which was greatly enjoyed by all present. The election of officers for the association resulted as follows: President, Dr. Wm. Gillett, Toledo, Ohio; Vice President, Dr. Theodore Wood, Angola, Indiana; Secretary, Dr. W. F. Shumaker, Butler, Indiana; Treasurer, Dr. A. G. Holbrook, Coldwater, Michigan. Detroit was selected as the next place of meeting.

Indiana State Medical Association.

The annual meeting of this Association was held at West Baden, on June 7th, 8th and 9th. The place of meeting was ideal in every respect, with the one exception of poor train accommodations in and out of West Baden. Those who live in the northern part of the state were particularly inconvenienced as a result of the train service for after the close of the meeting Friday morning they were compelled to wait until nine o'clock at night before getting a train out of West Baden, and then had to ride all night with one to three changes of cars in order to reach their homes by the following morning. The hotels at both West Baden and French Lick are admirably adapted to the needs of the Association, as both the principal hotels have audience rooms capable of seating all who attend the general and special sessions of the Society, and the other accommodations, including rooms, meals, and service were entirely satisfactory. Many of the members, and the Indianapolis physicians in particular, stopped with the well known Tom Taggart at the French Lick hotel, where they were charmingly entertained by Mr. Taggart, who made a special effort to see that the medical men had a good time.

The springs at both West Baden and French Lick were a source of interest to many of the medical men, and after drinking from several of the springs possessing different medicinal virtues, the doctors were fully able to understand why the resort is so popular among that class of people who desire to unload the system of accumulated impurities. Most of the waters are purely laxative in nature, while some exert a diuretic action, but none produce particularly disagreeable or uncomfortable effects unless taken in very large doses at frequent intervals and over a prolonged period.

The scientific program of the meeting was carried out under two sections—the medical and the surgical. The papers presented were generally of a high order of merit, as has been the rule at all meetings of the Indiana State Medical Association during the last few years. Among numerous excellent papers which received extended discussion may be mentioned the following: "Mesenteric Cysts," by O. G. Pfaff, Indianapolis; "Surgery of the Stomach," H. O. Pantzer, Indianapolis; "The Exudative Erythemas and Their Visceral Lesions," A. W. Brayton, Indianapolis; "Membranous Catarrh of the Intestines," Robert Hessler, Logansport; "Accessory Sinuses of the Nose," T. C. Kennedy, Shelbyville; "Some Points Indicating Immediate Operative Procedure in Brain Injuries," D. C.

Peyton, Jeffersonville; "Intracranial Complications Arising from Suppurative Disease of the Temporal Bone," J. F. Barnhill, Indianapolis; "Rational Treatment of Hernia," J. R. Eastman, Indianapolis.

President George T. McCoy, of Columbus, in his annual address on "Progressive Medicine," recounted some of the more important advances that have occurred during the past year.

Dr. Jos. D. Bryant, of New York City, who was the guest of the Association, delivered a very pleasing address on the subject "The Sunshine and Shadow in Medical Endeavor," in which he called attention to some of the fallacies and superstitions which prevail in the minds of the laity, and the reasons therefor, and mentioned some of the humorous as well as pathetic occurrences which happen in the practice of every medical man.

Dr. L. S. McMurtry, of Louisville, President of the American Medical Association, delivered an address at the opening session, in which he complimented the Indiana State Medical Association in having such an effective organization, and in being a society whose form of organization was in a large measure copied by the American Medical Association in the plan of re-organization. He made a plea for more scientific and social activity in the county medical societies, and urged the officers of all medical organizations to put forth extra effort to make county societies more active than ever before.

The social feature of the meeting consisted of a reception and ball tendered by Mr. Sinclair, proprietor of the West Baden hotel, on the first evening of the meeting, and a reception and ball tendered by Mr. Taggart, proprietor of the French Lick hotel, on the second evening. In addition to this Mr. Taggart gave the visitors carriage drives on both afternoons. The golf links, tennis courts, and bathing pavilions, and all other places of amusement were open to the visitors, and the electric line running between West Baden and French Lick furnished free transportation to the members throughout the time of the meeting.

The business of the Association was transacted by the Council and House of Delegates. Among the more important actions taken by the House of delegates was the adoption of a by-law changing the hour of the meeting of the House of Delegates to 2:00 p. m. of the first day of the meeting. This action was found necessary owing to the fact that the first meeting when held the night preceding the first day of the session had not been attended by a quorum. A

by-law was also adopted making it compulsory for every physician who desires to present a paper before the Association to have his paper and an abstract of the same in the hands of the secretary thirty days before the annual meeting, and making it a part of the secretary's duty to have the abstract printed in the program of the meeting. The House of Delegates also adopted the plan of redistricting the State as provided by the Council. The election of officers resulted as follows: President, George H. Grant, Richmond; First Vice-President, D. W. Stevenson, Richmond; Second Vice-President, H. C. Sharp, Jeffersonville; Third Vice-President, W. R. Davidson, Evansville; Secretary, F. C. Heath, Indianapolis; Treasurer, Albert E. Bulson, Jr., Fort Wayne. Councilors: First District—W. R. Davidson, Evansville; 2nd District, George Knapp, Vincennes; 3rd District, H. C. Sharp, Jeffersonville; 4th District W. H. Stemm, North Vernon; 5th District, M. A. Boor, Terre Haute; 6th District, W. D. Stevenson, Richmond; 7th District, W. N. Wishard, Indianapolis; 8th District, G. W. H. Kemper, Muncie; 9th District, Paul J. Barcus, Crawfordsville; 10th District, E. G. Blinks, Michigan City; 11th District, Robert Hessler, Logansport; 12th District, Albert E. Bulson, Jr., Fort Wayne; 13th District, C. A. Daugherty, South Bend.

President of the Council, W. N. Wishard, Indianapolis; Secretary of the Council, Albert E. Bulson, Jr., Fort Wayne.

Winona was selected as the place for the next annual meeting.

Fort Wayne Medical Society.

Medico-Legal Meeting of March 28, 1905.

Called to order at the Fort Wayne Club by President Drayer, with sixty medical men and attorneys present.

PAPERS:—"The Medical Expert" was the title of a paper read by Hon. Wm. P. Breen. (The paper appears in full in this issue of the *Journal-Magazine*.) "Medical Expert Evidence; is a Change in the Present System Desirable," was the title of a paper read by Hon. John Morris, Jr. (The paper appeared in full in the May issue of the *Journal-Magazine*.) "Insanity" was the title of a paper read by Dr. W. P. Whery. (The paper appears in full in the June issue of the *Journal-Magazine*.)

The discussion was opened by Dr. C. B. Stemen, who said that he fully agreed with Mr. Breen when he said that the medical expert should not only have a good education and well trained medical

mind, but be a medical man of experience, and a man of unquestioned honesty. Speaking of Mr. Morris' paper he said that there is nothing more deplorable than to see medical men disagree upon questions that they should not disagree upon, and he thought that if we could eradicate the selfish interest which control the actions of some medical men, we would at the same time eradicate much of the disagreement on medical questions. When on the witness stand the medical man should avoid all extravagant statements and confine himself strictly to facts.

Judge Heaton said that he wished to compliment Mr. Morris upon the character of his paper, as it bore evidence of careful thought and research. He said that there is a close relationship between the lawyer and the doctor, for each are under great obligations to the other. A good lawyer is frequently a fairly good doctor, and a good doctor ought to make a good lawyer, for he must, if he is a good doctor, possess many of the attributes which make for success at the bar. The law is the perfection of reason, or at least it should be, and the court is the fountain of justice. It is unfortunate that judges divide opinion on great questions, for it leaves a bad impression. It is also unfortunate that medical witnesses disagree in court. But in a summary of medical opinion it will generally be found that in the majority of instances competent medical witnesses testify much alike. The medical expert should be learned and honest, and should not be expected to give of his knowledge without adequate compensation. You cannot make a medical man answer on questions of investigation for common witness fees, and it is perfectly right and proper for the physician who is called upon to give expert testimony to demand expert fees.

Attorney C. M. Niezer said that there is no doubt but that the expert witnesses in many cases are prejudiced, especially those employed by corporations. The average expert, as we get them here, is honest and can be relied upon to give a thoroughly unbiased opinion. The trouble is that medicine is not an exact science and consequently there must be differences of opinion.

Dr. M. F. Porter said that, as far as expert testimony is concerned, so long as conditions exist as they are now, a totally unbiased expert is an impossibility. He said that he had met occasions where neither he nor any other man could be unbiased. The expert should go on the stand with the purpose of explaining certain things of which the court and jury are in ignorance. He should go there in

the employ of the court and not in the employ of any individual or corporation. He said he thought there was no necessity for the constant reminder that medical men are prone to disagree. As a matter of fact medical men do not disagree any more than any other class of men. For instance, if there was no disagreement among lawyers there would be no court trials, as every case would be settled out of court through agreement of the lawyers. Even judges disagree in their opinions, and the clergy is proverbially in a state of disagreement. Dr. Porter said that one of the rankest injustices practiced here in the city is the habit of asking for medical expert testimony without the payment of expert fees. He said that there was no reason or justice in it, and he for one would not tolerate it.

Attorney Chas. Worden said that he thought the better class of lawyers and better class of doctors understood each other fairly well when confronting each other in court, and will both aim to bring out the facts in an unbiased manner.

Dr. B. Van Sweringen said he thought there might be a better way of conducting cases requiring expert evidence, and suggested that the ends of justice would be obtained if medical questions are left to men who know more about the question, instead of leaving it to the ordinary jury. In the United States medical questions are submitted to the ordinary jury which frequently is made up of men in possession of but a limited amount of intelligence along any line, and knowing least about medical questions.

Dr. K. K. Wheelock said that the question will adjust itself when justice is obtained instead of success in winning cases. If the physician is properly approached he will do what is right, but generally the attorney wants to dictate the testimony, and is willing to lead the physician into all sorts of ambushes in order to accomplish a purpose. No physician should testify in a case unless he has been given the opportunity of making himself acquainted with all the facts in the case, and is privileged to give the case such study and thought as it properly deserves. After becoming thoroughly acquainted with the case, he should be prepared to give an opinion that is in keeping with honesty, and unless he can give testimony with a clear conscience he should step out of the case.

Attorney S. K. Wood said that the lawyer is frequently to blame in getting the medical testimony mixed up, and worthless so far as its effect upon the jury is concerned. The attorney should study

his case and the medical features of it more before attempting to bring out evidence from the expert witness.

In closing the discussion Mr. Breen said he thought it was well for the lawyers and doctors to discuss these questions together occasionally, as it has a tendency to bring the lawyers and doctors closer together. He said he had the greatest admiration for the well educated doctor who made it a point to tell the court and jury in plain understandable language what he knows about the medical evidence in any given case. He said he wished to compliment the physicians in Fort Wayne in particular upon proving themselves competent and trustworthy medical witnesses in courts of law.

Mr. Morris, in closing the discussion of his paper, said that the expert witness is not compelled to testify unless his fee is paid in advance. He said you cannot make men intellectual or honest by mere laws. Whenever you find a good judge, good lawyers, and good doctors in a case then everything moves smoothly and without disagreement. Whenever you get a poor judge, shister lawyers and incompetent medical men in a court of law, trouble is bound to occur.

On motion a rising vote of thanks was tendered the lawyers for their courtesy in attending and taking part in the meeting.

Adjourned.

J. C. WALLACE,
Secretary.

PERSONALS

Dr. C. H. English and Dr. Maurice I. Rosenthal, of Fort Wayne, have been made the medical directors of the new Lincoln Life Insurance Company, having its home office in Fort Wayne.

Dr. Nelson D. Brayton, of Indianapolis, son of A. W. Brayton, editor of the *Indiana Medical Journal*, and Vice-President of the Indiana State Medical Association, probably will be among the first of American physicians to be sent to the Isthmus of Panama to work for the government of the canal zone, in looking after the health of persons employed in the construction of the Isthmian canal. Doctor Brayton, who recently took the civil service examination, was one of the seventy-five who passed the examination, in

and stands sixteenth in the list of eligibles. The first list of eligibles has just been made up with seventy-five names on it, and as Doctor Brayton was among those who had the highest grades, he probably will be among the first appointed.

Dr. Nicholas Senn, of Chicago, who was a guest of the Fort Wayne medical profession on June 15th, informs us that he will sail from Sydney, Cape Britton Island on July 1st for the Arctic Zone, goingg which will carry relief stores for Lieutenant Peary. Doctor Seenn says that he will go to a point within five hundred miles of the North Pole, and expects the experience to be one of the most interesting of many which he has enjoyed in his numerous around-the-world travels. As usual, Doctor Senn has laid out an immense amount of literary work which he expects to perform while traveling in the frozen north.

Dr. B. W. Rhamy, for eight years the assistant of Dr. George W. McCaskey, Fort Wayne, has reecntly opened a laboratory for chemical, pathological and bacteriological research. Physicians who desire to have specimens of any kind examined will find Doctor Rhamy thoroughly competent to do the work in a satisfactory manner. In the advertising pager of this Journal Doctor Rhamy publishes a fee bill showing the amounts charged for various classes of work.

Dr. B. P. Weaver, Fort Wayne, is receiving the congratulations of his medical friends upon the birth of a daughter early in June. Dr. M. F. Porter, one of the editors of the *Journal-Magazine*, is grandfather of the child.

Dr. Miles F. Porter and daughter, Dr. and Mrs. G. L. Greenawalt, Dr. and Mrs. Albert E. Bulson, Jr., Dr. and Mrs. W. D. Calvin, Dr. E. J. McOscar and mother, and Dr. Alfred Kane, comprise the Fort Wayne attendance at the meeting of the American Medical Association held in Portland, Oregon, July 10 to 14. Dr. Porter is one of the Trustees of the A. M. A., and Dr. Bulson is secretary of the section on ophthalmology. Dr. Porter will read a paper before the section on gynecology. Dr. Bulson will read a paper before the section on ophthalmology.

MEDICAL REVIEWS

Department of Medicine and Therapeutics

In Charge of George W. McCaskey, A. M., M. D.
 Professor of Clinical Medicine in the Fort Wayne College of Medicine, Ft. Wayne, Ind.

Encephalomeningocele.

W. D. Haggard discusses the malformations of the brain and its coverings, of which he says the three chief varieties are encephalocele, meningocele and hydrencephalocele. His own case was an example of meningocele containing cerebral tissue. At birth a tumor as large as a goose egg was observed on the back of the head. This grew until, when the child was seen by the author, at the age of four months, it measured seventeen inches by twenty-three, and weighed five pounds after removal, the weight of the child being six pounds. The child reacted well after the operation, but died unexpectedly on the ninth day. The temperature had not been above 100 for the four days preceding, and for two days previously the only conspicuous symptom was a lateral nystagmus.—*Medical Record*, June 10, 1905.

Cushion Diseases.

J. D. Potts writes this article in order to call attention to the harmfulness of soft, warm, cushioned seats, which he considers productive of certain disorders of the perineal region. Through modern custom cushioned chairs, padded with hair or wool, and covered with some impervious material, have come into universal use, and the tubera ischii no longer perform the function for which they were provided. The warmth of the perineal structures in contact with the cushions is increased and the function of the sudorific follicles and sebaceous glands is stimulated to greater activity. The inability of the secretions to escape by friction or evaporation must sooner or later result in maceration and exfoliation of the epithelial layer. Since it is a well-known fact that the epithelial layer is the protective one, it may easily be inferred that infection by some one of the ever-present pathogenic bacteria will result as soon as its integrity is broken. Depletion of the blood vessels of the parts while under pressure must be followed by more or less congestion. Deranged nutrition ensues, and the foundation of many disease processes is

laid in the injured parts. The author has observed three classes of diseases, in which he regards the soft cushions as the chief etiological factor. The first of these has its seat in the integument, or beneath the integument of the perineum and perineal regions, and embraces such well-known diseases as eczema simplex, eczema marginatum, intertrigo, erythema simplex, pruritus ani, and tegumentary and subtegumentary abscesses. The second class has its seat in the mucous membrane and submucous tissue, and embraces such disorders as simple urethritis, simple proctitis, and ulcers, etc. The third class has its origin in the blood vessels and glands, and includes such diseases as hemorrhoids, papillomata, adenomata, etc. Prophylaxis consists in the use of the old-fashioned hard-bottomed seat or one with a cushion so firm that the tuberosities cannot sink down into it. The treatment of the three forms of cushion diseases indicated is then described in detail.—*Medical Record*, June 10, 1905"

A Contribution to Hemophilla, with Especial Reference to the Joint Symptoms of the Disease.

F. P. Kinnicutt describes the history of a hemophiliac whose symptoms began in infancy and persisted with great severity until the time of his death, at the age of sixteen. Frequent attacks of pain and swelling in the joints, including the smaller articulations, due to hemorrhage, and finally leading up to permanent structural changes, were a prominent feature of the case, and death was brought about by an intraabdominal hemorrhage. The ancestry could be traced with much minuteness, but no evidence of heredity was found. The general nature of the disease is then discussed with especial reference to the occurrence of joint manifestations, and the pathology of such conditions. The author points out the possibility of confusing arthritis of this nature with that of tuberculous or rheumatoid type, and says that in joint affections bearing a resemblance to tuberculous disease in infancy and childhood, the family history, as well as the personal history, should be studied carefully previous to operative treatment. The tuberculin test in a hemophiliac is not without danger from injury by the needle. The question of treatment is considered at some length, the preference being given to the physiological styptics rather than to such agents as tannic acid, salts of the heavy metals, etc. The author speaks highly of the value of calcium chloride in this connection, and says that the present views of the therapeutics of hemophilia may be

summarized as follows: (1) The internal administration of the lime salts, especially of the chloride of calcium, in doses of two grammes (30 grains) twice or thrice daily. Its continued use should be interrupted every two or three days by a period of twenty-four hours. (2) The application of solutions of the same salt, with compression, for accessible surface bleedings. Aqueous solutions of one-half per cent. are efficient. Another convenient mode of employment is in the form of a finely powdered chalk mixed with one-half per cent. solution of the calcium chloride. The less soluble lime salts, such as calcium phosphate, are equally efficient for local application. (3) The use of a combination of one-half per cent. solution of calcium chloride and one-sixth volume of a solution of nucleo-albumin, for local application. The nucleo-albumin can be obtained from aqueous extracts of various cellular tissues—testicle, thymus, thyroid, ovary, etc. If the prepared extracts are not available, a supply may be procured readily by mincing any of these tissues in a weak alkaline solution (1-500 solution carbonate of sodium) and filtering through gauze after a few minutes. (4) The application of a stream of carbonic-acid gas to the bleeding surface, in accessible hemorrhage. Its inhalation, freely mixed with ordinary air or oxygen, in concealed hemorrhage. (5) The use of four per cent. solution of chloral hydrate for surface bleeding, and also of adrenalin (1-1000) with compression.—*Medical Record*, June 10, 1905.

DEPARTMENT OF SURGERY GYNAECOLOGY *and* OBSTETRICS

In Charge of Miles F. Porter, A. M., M. D.
Professor of Surgery and Gynaecology in the Fort Wayne College of Medicine,

Cause, Prevention and Diagnosis of Cancer.

G. Kelling (*Munch. Med. Woch.*, October 25, 1904) has by experiments and reasoning about concluded that cancers result from ingested foetal tissues derived from animals, such as raw eggs, uteri of the hog, etc., He has produced tumors in the dog by injecting macerated chicken embryos into the mesenteric vein. The experiment succeeds oftener in old dogs and the structures most susceptible are the liver and testicle. Proof that the tumor cells are derived

from other animals is to be found in the biochemical reaction. Every organism affected with carcinoma will form precipitin against parasitic cells. If to the serum of the blood, drawn, say from the vein of the arm, there be added a dilute solution of albumin obtained from a chicken or a hog a precipitate will be formed provided the person from whom the blood was drawn has a cancer. In several cases of gastric cancer without definite symptoms this test gave positive results and at operation cancer was found. Cases upon whom this test is to be used should not be fed on raw eggs lest the albumin pass into the blood and cause a precipitate when no cancer is present.

Vaginal Caeserean Section.

W. E. Fothergill, speaking of vaginal Caeserean section (*Practitioner*, April, 1905) concludes as follows: Vaginal Caeserean section is indicated; (a) in cancer of the cervix during pregnancy, the operation being followed by vaginal hysterectomy; (b) 1—abnormal conditions of the cervix and lower uterine segment (rigidity, fibroma, stenosis, incarceration; (2) dangerous states of the mother removed or relieved by prompt emptying of the uterus (heart, lung and renal affections); (3) cases where death of the mother is imminent and can be foreseen." This operation will, he thinks, replace classical Caeserean section save in cases of mechanical obstruction by bony pelvis or by tumors.

To Locate the Stomach.

M. J. Knapp (*Med. News*, June 10) says the stomach may be quite accurately located by first having the patient drink a glass of cold water, when, after the lapse of about half a minute the examiners hand outlines the cooler area which will be the stomach area. If one waits too long the cool area will extend beyond the stomach or, the water becoming warm, it will not be discernible. The physicians hand must be warm, the patient examined either sitting or standing with the abdomen covered by single light layer of clothing.

The Yeast Poultice.

E. J. Kempf (*Indiana Medical Journal*) says that a yeast poultice is one of the best antiseptic applications for various septic conditions, such as gangrene, ulcers, erysipelas, eczema and as an application

for infected tissues after extensive injury. The poultice is prepared by taking a quart of beer yeast and mixing it with one pint of finely sifted cornmeal. The mixture is then placed near a fire until it rises. With the dough thus formed two ounces of finely powdered charcoal is incorporated. The writer gives six case histories of extensive injury and infection in which such poultices were employed with excellent results.

DEPARTMENT OF MATERIA MEDICA, THERAPEUTICS AND PEDIATRICS

In Charge of Budd Van Sweringen, M. D.
Professor of Theory and Practice of Medicine and Clinical Medicine in the Fort
Wayne College of Medicine.

*Six Years' Experience at the Massachusetts State Sanatorium
for Tuberculosis.*

V. Y. Bowditch and H. B. Dunham report in the *Jour. A. M. A.*, June 24, 1905, their experience at the above institution from 1899 to 1904 inclusive.

The following tables, if carefully studied, will well repay one:

TABLES SHOWING RESULTS OF TREATMENT.

[FROM EIGHTH ANNUAL REPORT]

Comparison of percentages during the first six years, up to Oct. 1, 1904.

Year of Discharge.	1899	1900	1901	1902	1903	1904
Per cent. of "arrested" and apparently cured" cases.....	34	42	46	48	49	45
Per cent. of all classes of "improved" cases.....	40	45	48	45	43	48
Per cent. of "not improved" cases..	26	13	6	7	8	7

PERCENTAGE OF INCIPIENT CASES WHICH WERE "ARRESTED AND
"APPARENTLY CURED."

Year.	1899	1900	1901	1902	1903	1904
Per cent.....	65	73	73	72	73	76

SUBSEQUENT HISTORY OF PATIENTS ON DR. BOWDITCH'S SERVICE UP TO MAY 1, 1905.

	Year of Discharge.						
	1899	1900	1901	1902	1903	1904	Total
Number of patients discharged							
with "disease arrested".....	35	56	85	90	132	141	539
Number of patients now in							
good health and working....	18	39	60	65	105	113	400
Number of patients who have							
not replied to letters lately...	2	9	3	8	10	17	50
Number of patients who can							
not be traced.....	4	1	2	1	1	0	9
Number of patients in whom							
symptoms have returned....	2	2	9	8	4	11	36
Died*.....	9	5	11	8	12	0	45
Patients left sanatorium "im-							
proved," but now reached							
condition of "arrest".....	9	5	14	7	15	13	63

Of those who died in the class of 1899, all returned to the same residence, except one, who went from Springfield to Boston and one, who went from Boston to Colorado.

All had returned to the same occupations, except one girl, who married and had a child.

Of the 18 at work now, all returned to the same residences, except 2; one went from Boston to Colorado, and 1 from Worcester to a Canadian town.

All returned to the same occupation as before entrance.

All but 2 of the 9 "arrested since discharge" cases bettered their residence, 2 of them being in Colorado.

In the class of 1900, of the 7 patients who died or relapsed, 2 changed occupation or residence, and 1 changed climate.

Of the 39 patients who remain well, 13 changed occupation or residence and 2 changed climate.

In the class of 1901 of those who relapsed (20) 1 changed climate and occupation; 2 died from causes other than tuberculosis.

Of those who are in good condition, (60),

10 made a change of residence.

3 made a change of climate.

6 made a change of occupation.

In the class of 1902, of those who relapsed (16),

1 changed climate.

3 changed residence.

2 changed occupation.

Of those who are now in good health (65),

3 changed climate.

12 changed residence.

7 changed residence.

These figures should show to all legislators the value of similar institutions and no state should be without this humanitarian aid in the fight against tuberculosis.

Treatment of Chronic Diarrhoea.

Wilcox urges that diarrhea being a symptom, the cause, which may be mechanical, nervous or hemic, always should be ascertained. The treatment of the mechanical forms of diarrhea is based primarily on removing the cause of the irritation. This is accomplished by freeing the alimentary tract from all substances likely to cause increased peristalsis. This, in the dyspeptic form of mechanical irritation, is accomplished by a full dose of castor oil. If there is proteid indigestion the process can be checked by resorcin, six grains, four times daily, to which 20 minims of tincture of nuxvomica should be added if there is diminished motor function of the stomach. After a few days give three drops of strong nitrohydrochloric acid, or 10 drops of hydrochloric acid with one-twentieth grain of strychnin sulphate, in the midst of each meal. In amylaceous indigestion, thorough mastication of starchy food, limitation of fluids with their ingestion, and the administration of diastase, in 15-grain doses, an hour after meals, will generally correct the difficulty. The use of sodium bicarbonate Wilcox considers improper in all gastric and in most intestinal indigestions. Magnesia ponderosa in 10-grain doses after meals meets all indications. If bile pigment is present in the stools a combination of salicylic acid, 6 grains, with the same amount of acid sodium oleate, with 4 grains of phenolphthalein and one-half grain of menthol may be given once daily, for several days. Fecal impactions are best relieved by softening them by quart injections of warmed olive oil, or 1-dram doses of arsenic-free sodium phosphate twice daily; 1/100 grain of physostigmin salicylate three times daily, to enable the intestinal muscle to recover its tone. Opium is only admissible when the alimentary

canal has been thoroughly emptied, to check excessive peristalsis. It should be given hypodermically, as morphine, in substantial doses, and not repeated. A prescription for opium, or any of its preparations or alkaloids, should never be trusted to nervous patients. There is too great danger of habit formation. The tannin preparations are sometimes useful by temporarily inhibiting the action of bacteria and their toxins. Bismuth naphtolate, bismuth tribromophenolate and bismuth tetraiodophenolphthaleinate are more effective.—*Jour. A. M. A.*

DEPARTMENT OF OPHTHALMOLOGY OTOLOGY, LARYNGOLOGY & RHINOLOGY

In Charge of Albert E. Bulson, Jr., B. S., M. D.

Oculist and Aurist for St. Vincent's Orphan Asylum, the Allen County Orphan Asylum and the U. S. Pension Bureau for Northern Indiana and Northern Ohio; Professor of Ophthalmology in the Fort Wayne College of Medicine, Fort Wayne, Indiana.

The Importance of Early Recognition of Suppurative Ear Disease.

A. G. Bryant, in a long article on this subject, contributes a very full discussion of middle ear disease, its etiology, symptomatology and sequelæ, together with the diagnosis and treatment of the various phases of the malady. The disease is so common an accompaniment of the ordinary diseases of childhood that the practitioner should be as familiar with the ear speculum and probe as with the stethoscope, and it should be remembered that it is often the objective examination that gives the first clue as to the existence of middle ear trouble in small children. The following plan of treatment is outlined for early cases. Douche the ear gently every two hours with one or two quarts of a sterile normal salt solution as warm as can be borne, to be followed by a hot water bag or a hot salt bag. Give one grain of calomel in 1-10 grain doses and repeat as necessary. Use cleansing and astringent washes for the throat and cleansing sprays for the nose. Caution against too forcible blowing of the nose, or blowing both sides of the nose at once. Have the patient remain in bed until the acute symptoms have abated. The bromides or phenacetine may be given, but with caution, and only for a few days. Avoid all opiates, as they mask the symptoms. Early paracentesis is urged, especially in influenza cases, and the technique

of the operation and the after treatment are described. Mastoid involvement and the treatment of chronic suppuration are also discussed.—*Medical Record*, May 13, 1905.

The Treatment of Inoperable Cases of Malignant Disease of the Orbit by the X-Ray.

C. S. Bull says that while malignant disease of the orbit which has apparently not originated in or involved the adjacent sinuses should be extirpated by the knife as soon as possible, the consensus of opinion seems now to be that when the neighboring sinuses are involved a complete removal of the growth is impossible, a recurrence of the growth is certain to appear, and with each repetition of the operation the return of the disease is hastened, and the life of the patient is by just so much shortened. On the other hand, in view of what we actually know of the action of the x -rays, it would seem not only wise, but our duty, after such operation by the knife as may be necessary, to expose the parts a certain number of times to the x -rays, in order, if possible, to destroy isolated cells or aggregations of cells in the neighboring parts which cannot be reached by the knife. It is stated on good authority that there has been a marked diminution in the death rate following operations on patients so treated. The author's experience, based on his own cases has satisfied him that the x -rays are of value in removing the pain so constantly complained of, and he, therefore, believes that the treatment is to be recommended in inoperable cases because it relieves much of the patients' suffering, and thus may prolong their lives. It would seem that the more recent and superficial a malignant growth is, the more rapid and favorable are the results from x -ray treatment, but it takes time to prove the ultimate good results. The author presents the detailed reports of ten cases from his own private practice, in which the x -ray treatment was employed after excision by the knife. Of these ten cases, two were very much improved if not apparently cured, and of these two one was an epithelioma and the other a carcinoma. The remaining eight cases, in which no demonstrable effect was produced by the x -rays, were all sarcomata. In all but one of these the pain was more or less effectually relieved. No untoward results of the action of the rays were observed in any of the cases.—*Medical Record*, June 24, 1905.

Removal of the Lens in Myopia.

J. L. Barnes contributes an exhaustive communication on this subject and describes a case of his own in which the bilateral operation was followed by very happy results. The patient was a girl of sixteen, presenting a degree of myopia amounting as nearly as could be estimated to not less than 25 D. One lens was removed by direct linear extraction, though the author says that he would not today use this method. Some months later the second lens was also removed by the same method but with a slightly different technique. Now, about a year later, her vision remains 20-30, which is in both eyes two and one-third times what was obtained before the operation. She can read Jager No. 1 at eight inches with her nearly emmetropic correction, and also without glasses. She still presents a convergent strabismus which supervened after the operation, and which the author suggests may be explained by the new effort at accommodation (aphakic) operating, as in all accommodation acts, with the associated convergence in all eyes. The author then considers at length the history of the operation, its indications, contraindications, effects, and results, and comes to the conclusion that there is a wide diversity of opinion as to its advisability. It appears, however, that the large majority, particularly of European ophthalmologists believe that ablatio lentis, in spite of its not being ideal in all respects, is within certain limitations indicated, and that it constitutes a very marked advance in eye surgery. It is generally believed that myopia and many of its attendant pathological lesions are by such operations corrected and subjects restored to independence. About 2,500 cases have been reported from abroad, while the author has found records of not quite fifty cases done in this country, so that American statistics do not afford a basis for any conclusive opinion. Fakala deserves the credit for bringing the operation into prominence, and his method, that of free dissection with linear extraction, is now the well-established plan of operating.—*Medical Record*, June 17, 1905.

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BOOK REVIEWS

Welch & Schamberg on Acute Contagious Diseases.—A Treatise on Acute Contagious Diseases by William M. Welch, M. D., Consulting Physician to the Municipal Hospital for Contagious and Infectious Diseases; Diagnostician to the Bureau of Health, etc., Philadelphia, and Jay F. Schamberg, A. B., M. D., Professor of Dermatology and of Infectious Eruptive Diseases, Philadelphia Polyclinic; Consulting Physician to the Municipal Hospital for Contagious and Infectious Diseases, and Assistant Diagnostician to the Philadelphia Bureau of Health, etc. In one very handsome octavo volume of 781 pages, illustrated with 109 engravings and 61 full-page plates. Cloth, \$5.00 net; leather, \$6.00, net; half Morocco, \$6.50, net. Lea Brothers & Co., Publishers, Philadelphia and New York, 1905.

This work can not be spoken of too highly as an authoritative exposition of the subjects of variola, veracella, scarlatina, rubeola, rubella, typhus and diphtheria.

The long experience of the writers gives them the privilege of substantiating every point discussed by innumerable illustrative cases.

The plates and illustrations are particularly to be commended. Indeed, the serial photographs of a well-marked case of variola are in themselves a clinic, illustrating, as they do, the progress of the case from beginning to recovery.

We would like to draw the attention of all health officers, (all of whom should have a copy) to the remarks on the subject of quarantine in scarlatina and the statement that a subject of this disease should be debarred from school for "not less than two months."

The usual quarantine of ten days or two weeks is totally inadequate in the light of the statement that it should be continued until the cessation of all nasal and aural discharge and desquamation, such processes covering a period usually of six or seven weeks and often extending to eight, ten, twelve or fourteen weeks.

The publishers are to be congratulated upon bringing out a work of such merit in such perfect manner. The type is large and clear, the paper good and the plates superb.

B. VAN S.

In those puzzling cases of menstrual derangement where all other known remedies fail, Aletris Cordial Rio often cures.

When an internal mucous astringent is indicated, in such cases as Cholera Infantum, etc., Kennedy's dark pinus canadensis should be given in an alkaline medium.

Fort Wayne Medical Journal-Magazine

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219 West Wayne Street.

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207 West Wayne Street.

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VOL. XXV

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No. 8

EDITORIALS

The Reid Hospital at Richmond, Indiana.

The beneficence of Daniel G. Reid in providing his home city of Richmond with a modern hospital is one that should interest every lover of his race, and Indiana, as well as Richmond, should be proud of him. He is probably the richest man in Indiana, but while he indulges in the yachting, the traveling and the other luxuries of the rich, he seems to find equal pleasure in well-doing. The hospital made possible by his gifts of money—probably \$60,000—is not the only evidence of his right thinking as to the proper use of money. He built a church for the congregation of which his parents were members, costing \$150,000. He has shown a sterling interest in art and is making his beloved home city one of the art centers of the west. Fort Wayne has no Reid in point of wealth, but it has wealth

in the hands of men of narrower ideals. His example is worth their study.—*Fort Wayne Daily News*.

The Medical Section at the Portland Meeting.

The work of the medical section of the recent meeting of the A. M. A. at Portland was notable in several respects. Considering the remoteness of the place of meeting the attendance was extraordinary large. The room in which the meeting was held was altogether inadequate although capable of seating between four and five hundred. Those who came late to the meeting had to either stand or go away as a rule. This it shared in common, of course, with the entire association, as the total registration was very large under the circumstances, being something over 1,700.

The program of the medical section was one of unusual merit. Among its more important topics may be mentioned one symposium of seven papers on nephritis, and another of four on gastric conditions. It is true that three of the seven papers on nephritis were not read on account of the absence of their authors. In the gastric symposium there were no absentees.

While there was nothing especially new or startling in these or any other of the twenty-seven papers listed on the program, they were, taken altogether, of an unusually high order and presented the various topics in a way to stimulate thought and investigation to an unusual degree.

The officers of the section are entitled to great credit for the discrimination used in the selection of topics, and the general makeup of the program of the Portland meeting has set a standard which will challenge the emulation of subsequent meetings. G. W. McC.

A New Journal.

If one were asked, "is there room or need for another medical journal?" he would probably unhesitatingly reply—No. Certainly the writer would have answered so a few weeks ago, but since he has seen and read the first two numbers of "*Surgery, Gynecology and Obstetrics*" he is constrained to change his opinion. The editorial staff is a sufficient guarantee as to the character of the articles contained in this journal, but does not prepare one for the artistic elegance which he finds on going over its pages.

If the present standard is kept up there can be no doubt as to the success of the publication, and that it will be kept up no one will doubt who knows the men at the head of it. M. F. P.

Delay in Issuing the August Number.

The editor and nearly all the associate editors were away during July and a portion of August taking a midsummer vacation as an incident in connection with attendance at the Portland meeting of the American Medical Association. In consequence there was unusual delay in getting "copy" into the hands of the printers, resulting in the late appearance of this number, for which we ask our readers to grant indulgence.

ORIGINAL ARTICLES

No paper published or to be published elsewhere as original
will be accepted in this department.

*Treatment of Chronic Constipation in the Infant.**

BY
DR. S. D. BEAVERS,
Decatur, Indiana.

In discussing the treatment of chronic constipation in infancy I have borne in mind the division of the subject into constipation, obstipation and fecal impaction, and have chosen to limit myself to the discussion of constipation proper.

Where we have a history of constipation in the family the earliest days of infancy mark the time when treatment should be begun.

Now what do we mean by treatment, and why should it be instituted at so early a date? Treatment in this class of patients consists of the following measures, the importance of which I believe to be in the order in which they are here given: First, the establishment of regular habits from the very beginning; second, a careful and intelligent modification of the infant's food; third, properly applied massage and exercise; fourth, the application of local treatment by means of suppositories which may be plain or medicated; fifth, enemata; sixth, drugs by the mouth.

The force of habit probably nowhere exhibits its power for good or evil so well as in the training of the child with regard to regularity in answering the calls of nature. Now this training may be begun very much earlier than most mothers think possible. As a rule the stools are formed soon after the establishment of the mammary

*Read before the Fort Wayne Medical Society, June 6, 1905.

secretion and from this time on the infant will usually have two bowel movements a day, although some infants have but one, and if this be of normal consistence and quantity we would not consider the infant constipated. In the beginning the child should be laid upon the bed at the same hour each day and its abdomen stroked gently along the course of the colon. If the infant objects seriously to this procedure it may be done while the child is nursing.

In breast fed babies we generally find the bowels regular, but occasionally even here some alteration of the food may be required. In breast fed infants constipation is usually due to the fact that the milk is low in fats and high in proteids, or perhaps low in both fats and proteids; in the latter case the stool lacking volume. Where woman's milk is too high in proteid, reduction may be made by making some change in the woman's habits. Women with rich milk are usually in good health, have well developed breasts, are well fed and often in the habit of taking alcohol. For this class of women we absolutely interdict the use of alcohol, the proteid diet is reduced, and a definite amount of daily exercise prescribed. This is often followed by a distinct reduction of proteid, and if we now have a high enough fat percentage some relief from the condition of constipation may be expected. If we have a low fat percentage from one-half to two teaspoonsful of cream may be given immediately after each feeding. Often the use of laxative food by the mother is followed by improvement in the condition of the bowel movements of the infant. If improvement does not soon follow we are justified in substituting artificial feeding for the breast and Holt says that as his experience has grown his hesitancy has lessened and that it is important to make the change before the constipated habit becomes fixed, as everyone knows it is easy to obtain uniform fixed percentages, and by a little care we can by milk modification obtain a food suited to the digestive capacity of the infant in hand. When seeking a remedy through the infant's food it is to be borne in mind that excess of proteid, associated with deficient fats, salts and sugar are the conditions that usually present themselves for modification. If the infant is taken from the breast during the first few months we find as a rule a milk containing from 2 to 3 per cent of fat and 1 per cent of casein will usually agree. At a somewhat later period the fat may be increased to from 3 to 4 per cent and the casein to $1\frac{1}{2}$ per cent. After the sixth month the milk may contain 4 per cent fat and 2 to 3 per cent casein. A formula then for the first few months

would be made as follows: Milk, $2\frac{7}{8}$ ounces, skimmed cream, $5\frac{1}{4}$ ounces; water, 24 ounces; milk sugar, 1 3-5 ounces or four table-spoonfuls. This formula gives a fat percentage of 3 per cent; sugar, 6 per cent; proteid, 1 per cent, in a total quantity of 32 ounces. This quantity may be increased or diminished to suit a given case. After the sixth month a formula containing milk, $13\frac{1}{3}$ ounces; skimmed cream, $6\frac{2}{3}$ ounces; water, 20 ounces, and milk sugar, 2 ounces, gives fat percentage of sugar, 7; proteid, 2; total quantity for 24 hours, 40 ounces. Of course these formulæ are merely illustrative, the food having to be adjusted to suit the individual case.

Constipation appearing as a result of proteid indigestion and not being amenable to ordinary food modification, presents an interesting condition for treatment. In this case we have found it to be a fact that whey will often be taken care of when all other food disagrees. The reason for this was never clearly understood until Westcott demonstrated the fact that it was not a reduction of the total proteid that was always desired, but of certain constituents of the latter. Churchill, in the *Journal of the A. M. A.*, May 27, 1905, shows very clearly the importance of eliminating the caseinogen, as it is this element of proteid that causes the trouble. Now if we will look for a moment at the composition of whey we will see that we have a food free from the latter element, whey being composed of:

Lactalbumen.....	0.8-1.00	Per Cent.
Fat.....	.32	“ “
Sugar.....	4.79	“ “
Salts.....	0.65	“ “
Water.....	93.38	“ “

This gives the infant a simple article of diet very readily digested. The percentage of lactalbumen is nearly that of woman's milk, while the fat and sugar are low. The child may be started on this food, the fat being increased after a time by the addition of cream, and the sugar percentage raised by the addition of milk sugar. When the digestion has improved some we may add caseinogen in the form of fat free cow's milk.

Constipation in the infant may present itself as one of the symptoms in fat indigestion. Now, as a rule, we expect the very opposite to be the case, but Holt has presented a series of cases showing constipation, with hard, light colored stools, as the result of feeding too high percentages of fat, the cases all improving with a reduction of the fat.

It is advisable to exercise some caution in making a diagnosis, for it is possible to mistake an apparent for an actual constipation. By an apparent constipation I mean the condition in which an emaciated, fretful child, having a bowel movement every third or fourth day, is seen. Here frequently the constipation is simply due to a deficiency of food. The remedy is self apparent. Again, the amount of water given to the infant is very often insufficient for its needs.

With regard to the third therapeutic measure mentioned, namely, massage, only a word is necessary. The idea is to move the abdominal walls upon the intestine, thus stimulating peristalsis. It should be done with the flat of the hand and the movements should be gentle.

In young infants suppositories find their indication in conditions requiring slight stimulation to the rectum. The plain suppository usually consists of soap, which is generally efficient, but if its use is persisted in considerable irritation may be produced. The same objection may be offered to glycerine suppositories, although these also are productive of good results when an immediate effect is desired. Suppositories of gluten are useful, requiring more time for their action but causing much less irritation than those made of glycerine.

When drugs are indicated their incorporation in the suppository is frequently the best way in which they can be given, especially when local conditions are at fault. The drugs most frequently used in this way are *ext. belladonnæ*, *ext. hyoscyamus*, sulphur and aloes.

We may have chronic constipation due to the viscid condition of the intestinal mucus, or again the mucus may be partially absent. This condition is found in chronic intestinal catarrh, in fevers, where we have a profuse secretion from the skin, or kidneys, and frequently because too little water is given the child to drink.

In catarrhal enteritis we have diarrhœa, alternating with constipation. In some cases these are benefitted by large daily injections of water containing sodium bicarbonate in the strength of 1 to 2 per cent.

There still remains for our consideration those cases of chronic constipation due to a deficient muscular tone, both of the abdominal muscles and those of the gut. This condition exists in rachitis and we may have chronic constipation appearing along about the third or fourth month as the first symptom of rickets long before any of

the other classical symptoms show themselves. For this class of cases the indications for treatment point plainly to those measures directed against the general malnutrition; namely, improved hygienic surroundings, tonics, etc.

I have purposely omitted the consideration of those cases due to mechanical obstruction, as such cases more properly belong under the head of obstipation.

The Modification of Milk in Infant Feeding.*

BY

DR. L. PARK DRAYER,
Fort Wayne, Indiana.

The indications for the modification of milk in infant feeding are briefly these: First, failure on the part of the infant to increase in weight and development which naturally follows spitting up of food, diarrhœas, and malnutrition; Second, in transmissible disease in the mother; Third, congenital malformations, such as cleft palate, hair lip, and tumors in the mouth of the infant.

The milk in the human breast may be modified oftentimes and meet the indications required for the proper nourishment of the infant. A scant supply of breast milk calls for the ingestion of larger amounts of fluid and a reasonable amount of exercise. The constituents of the breast milk, in excess, or deficiency, may be corrected by giving special attention to each component part of the human breast milk. It is first important to determine the composition of the human milk. This can be readily done by means of the Pioscope, or by the Holt milk set, or by the Babcock test. The two former are the most convenient and are herewith presented for your inspection. The composition of human breast milk is in the average form two to four per cent butter fat, from one-half to two per cent proteid, and six per cent milk sugar. If the butter fat is too high, as indicated by vomiting of food immediately after nursing or by a fat diarrhœa, it is readily corrected by reducing the fat forming food in the mother, by advising more exercise, and by increasing the amount of fluid taken. If the proteid is too high, as indicated by constipation alternated by diarrhœa with colic, most pronounced and with curds appearing in the stool, then the reduction of proteid diet for the mother and an increase in the amount of exercise taken will be followed by a reduction in the proteid and a correction of the trouble. If the proteid is reduced in quantity just the reverse of the above

*Read before the Fort Wayne Medical Society, June 6, 1905.

order will correct the difficulty. It must be remembered that each case is a law unto itself, at first, and is treated as an individual case with no rules or strictures to govern. If, however, when all efforts at correction of the breast milk fail to nourish the infant, and all methods are simply followed by the usual evidences of bad nutrition, then percentage feeding should be immediately undertaken.

Proprietary foods in isolated and rare cases are of undoubted value. They should, however, be employed only after all other methods have failed to give relief. In ninety per cent of the cases proprietary foods are to be mentioned only to be condemned. The modification of the same cannot be scientifically done and will therefore not be mentioned in this discussion.

Percentage feeding is to be discussed in two divisions. First, in health; Second, in disease, and to start at the foundation principle we mention the quart bottle of pure cow's milk. The composition of cow's milk is as follows: Butter fat, four per cent; proteid, three per cent; and sugar of milk, six per cent. It will be noted that the composition of human and cow's milk varies in two important particulars. In the human milk the proteid is one per cent, in the cow's milk, three per cent. In human milk the butter fat is from two to four per cent and in cow's milk the butter fat is constantly four per cent. Given the quart bottle of milk, allowed to stand on ice four hours, the top one-third is a ten per cent milk. The top one-half is a seven per cent milk and the whole is a four per cent milk. These few figures should be born in mind continuously when attempting to modify cow's milk for infant feeding.

Now let us consider the necessities of the infant in the early months of life. The composition of the milk for a normal baby should be six per cent milk sugar, one per cent proteid, and three per cent butter fat. Hence the proportion of fat to proteid is as three to one. Employing this proportion and the quart bottle proportion we deduce the per cent of butter fat in the twenty ounce mixture. The deficit in the twenty ounces being made up of a six per cent milk sugar solution which gives us the equation, the percentage of fat equals one-half the number of ozs. used for a twenty oz. mixture. To illustrate: If five ozs. of the upper one-third of the quart of milk which is a ten per cent milk is used, the percentage of butter fat would be one-half the number of ozs. or a two and one-half per cent milk. If we remember these few facts we have a basis upon

which to work and with which we may be able to obtain any percentage desirable.

The articles necessary for the home modification of milk are quart bottles with open mouths, easily cleaned, one eight oz. graduate, one bottle brush, one oz. cream dipper, one Arnold steam sterilizer, plain aseptic absorbent cotton, one-half dozen eight oz. bottles and one dozen plain rubber nipples. It might be well to stop here and say that the rubber tube and nursing bottle is an unscientific, a dangerous and a death healing instrument, which in some cities and in many countries are prohibited from use by law, a violation of which law is punishable by imprisonment and fine. A useful addition to the appartaus is a Materna milk glass which is presented here. This glass is of value in baby feeding in a case in which the digestion is normal. Nothing has been said relative to the course of the milk supply than that it should be pure milk. Herd milk is to be used by preference for various reasons. The cattle should be healthy, well stabled, well groomed, and well fed, and the milking should be done in a cleanly manner.

The above mentioned methods are followed usually in what are known as difficult cases. The symptoms which indicate a modification of milk are, first, vomiting, which speaks in the vast majority of cases of a too high percentage of butter fat; second, the loose, chronic diarrhœa, which also speaks for a high percentage of butter fat with a low percentage of proteid and filthy milk; third, constipation, which means a low butter fat and a high proteid; fourth, curds in the stool, which means too high proteid; fifth, large, dry, gray stools, which mean a too high percentage of fat and too high a percentage of milk sugar. All of the above named symptoms are as a rule readily corrected by reducing or increasing the offending constituents. Unfortunately we meet with cases in which simple modification to relieve any of the above named symptoms fails to give relief. Then we are obliged to fall back on other foods made acceptable by various methods of preparation. Of these the most important are the animal and vegetable broths. Meat broth and mutton broth are of value given with the milk or without it for cases where progressive loss of blood is noted, remembering that the element in the baby's food which makes muscle and blood is the proteid. Barley water, made by using one tablespoonful of Robinson's barley flour in one pint of water, cooked thirty minutes, strained through cheese cloth and kept in a self-sealer jar on ice and mixed with the milk

in the proportion of one part to two or three of milk is of decided value in cases of proteid indigestion, and acute and chronic diarrhœa. Puree of white beans, split peas, or lentils is of the greatest service in the latter months of the first year, likewise the strained gruels, particularly oatmeal.

*Injuries of the Elbow Joint.**

BY

DR. H. A. DUEMLING,
Fort Wayne, Indiana.

The elbow joint is formed by the trochlear surface and the capitellum of the humerus, and by the fossa sigmoidea of the ulna and the upper surface of the head of the radius. The head of the radius articulates within the joint with the outer surface of the ulna, the so-called fossa lunatus. The external condyle of the humerus bears the above mentioned capitellum, the internal condyle, the trochlea, and each condyle has placed upon it the epicondyle.

The motion of the elbow joint is practically a hinge motion, but the inclined plane construction of the trochlea gives the extended forearm a screw-like motion and the axis of arm and forearm do not coincide. The range of motion of adults is 150 degrees.

Forced adduction and abduction is resisted by the lateral ligaments. The inner one is attached above to the condyle and epicondyle below to the ulna, the outer one above to the condyle and epicondyle, below to the annular ligaments which encircle the head of the radius and through it indirectly to the ulna. It is the annular ligament, slung around the head of the radius like a collar, which permits the rotation of the radius in pronation and supination.

The epiphyseal lines of the humerus as well as of the radius and ulna are within the capsule of the joint—a matter of no small moment when we remember the frequency of dislocations and fractures in and about the elbow joint of children. The epicondyle and the portion of the condyle immediately under it are outside of the joint capsule, but the middle portion of the capsule extends above the trochlear fossa both anteriorly and posteriorly. In the forearm the head and neck of the radius are within the capsule of the elbow joint; however, of the ulna we find only the fossa sigmoidea and lunatus in the capsule and the posterior surface of the olecranon free.

This arrangement borne in mind shows us where to look for intra articular effusions, viz: At those points where the joint capsule

*Read before the Fort Wayne Medical Society, April 11, 1905.

is nearest the surface; and this is on both sides of the olecranon, under the internal condyle, and especially over the head of the radius under the external condyle (painful point) a characteristic sign is the blood, etc.

Congenital defects: Phocomelia and hemimelia may occur through amputation by amniotic adhesions and bands and in other ways. They play no great rôle in surgery. Congenital dislocation of the elbow joint has been noted. Absence of a portion of or the entire radius has been seen and I had the pleasure of reporting a case to you of congenital absence of the radius of both forearms some time ago.

The exact diagnosis of fractures within the territory of the elbow joint is peculiarly hard to make on account of the complicated mechanical and anatomical arrangement of the joint. It is a wise plan therefore to proceed in a systematic manner when the suspicion of fracture or dislocation is aroused. I follow a typical plan, which is as follows: Remove the clothing from both arms so that the sound arm may be compared with the injured one. Note the position of forearm to arm. Note if any shortening has occurred. Note the position of the hand. Carefully inspect the arm for bruises, bleeding points or wounds, and finally ascertain the subjective symptom of pain. After having elucidated these points look for certain fixed points. If the swelling permits, four fixed bony points may be demonstrated, which are of the greatest value to the correct diagnosis. Three of these, the olecranon, the external epicondyle and the internal epicondyle are in a line when the forearm is extended. They form a triangle when the forearm is flexed. This constant relation explains their value as a diagnostic aid in fractures and dislocations of the joint. The fourth fixed point is the head of the radius just under the external epicondyle. After the points are located and their position normal or abnormal noted, find the painful points. Elicit, if possible, crepitation, and finally test the mobility, normal or preternatural of the joint, in adduction and abduction. I would advise the use of chloroform always. It may be possible to thoroughly examine an adult without anæsthesia, but children form by far the greater contingent of these cases and it is impossible in my opinion to make a thorough examination of the infant's elbow joint without anæsthesia. I believe that some of the bad results following injuries to the elbow joint of the child are directly traceable to the superficial examination, without anæsthesia, which the injury re-

ceived and the consequently blind and slipshod treatment. We all know how fruitful elbow injuries are of malpractice suits—what I have just said is the main reason for this.

The injuries to the elbow joint proper will include those of the articular end of the humerus and those of the head and neck of the radius, and those of the coronoid process of the ulna and the olecranon process. These are the portions of bone included within the capsule of the joint. In discussing fractures of this joint, however, it is necessary to include the fractures of the epicondyles of the humerus, the coronoid process of the ulna and neck of the radius. To facilitate matters I present the following group of fractures, to which I have added a form recently described by Kocher, viz: The fracturing off of the articular cartilage which is in contact with the radius. The group appears as follows: 1. Supracondyloid fracture of humerus; (a) transverse; (b) Y and T fractures. 2. Fracture of external condyle. 3. Fracture of internal condyle. 4. Fracture of external epicondyle. 5. Fracture of internal condyle. 6. Fracture through condyles within joint. 7. Kocher's fracture.

In the supracondyloid variety the line of fracture is, as the name indicates, above the condyles and epicondyles; through the lower end of the diaphysis. It is, therefore, strictly speaking, outside of the joint. Usually the fracture is oblique and not transverse and occurs as the result of a fall on the palmar surface of the hand while the forearm is hyperextended and abducted. This fracture occurs because the joint capsule is more resisting than the bone (before 10th year). If the bone, on the other hand, does not yield, a dislocation will result. The symptoms may be summarized as follows; The lower end of the humerus is carried backward by the forearm, the upper end of the fractured humerus pushes the soft parts forward. If the swelling is not too great the angular deformity thus produced is well seen and then simulates a forward dislocation of the humerus. The examination now proceeds on the lines laid down above. The fixed points (epicondyles, olecranon and head of radius) are sought and their normal position ascertained. We find, too, that pressure over these points elicits no pain, but that the pain is higher and situated above the joint. Occasionally the sharp edge of the lower fragment of the humerus can be felt. The deformity is easily corrected by extension, but as easily returns when the effort ceases and frequently crepitation is elicited. Flexion of the forearm upon the arm is limited, but hyperextension may be present. Add to this the

lateral preternatural mobility and your diagnosis of supracondyloid fracture rests secure. This variety occurs chiefly in children under ten years, while the Y and T fractures usually occur in adults and as the result of direct violence, crushing by wheels and dum dum injuries. The method of diagnosis of the latter is practically the same as in the former with the addition that the condyles may be moved one upon the other. Y and T fractures lacerate the tissues more frequently and occur frequently as compound fractures.

Relatively frequent we see the fracture of the external condyle. Inasmuch as a fall upon the hand may produce it, as well as direct force applied to the exposed process. Children are peculiarly liable to this accident, probably because there exists an epiphyseal line (up to the 15th year) connecting the condyle with the diaphysis of the humerus along which the fracture is conducted. In following our routine of examination we may demonstrate an abnormal position of the condyle. Occasionally motion is very free. Swelling and haematoma of the joint frequently are the only symptoms characterizing an injury to the joint. Perhaps we can demonstrate crepitation. The most valuable point in differential diagnosis however lies in preternatural adduction and abduction of the arm in extension. As the external lateral ligament takes its origin from the external condyle it is inserted into the annular ligament encircling the head of the radius, the fracturing off of the condyle from the humerus permits abnormal adduction of the forearm.

Fracture of the ext. epicondyle without accompanying fracture of the condyle is so rare that I only mention it for the sake of completeness. The diagnosis after what has been said is obvious.

Fracture of the internal epicondyle is more important than the former because it is more frequent and sometimes associated with injury to the ulnar nerve, which is manifested by the peculiar numbness and sometimes trophic disturbances. The diagnosis is made by following the above plan, viz: Establishing the mobility and dislocation of the bone.

The internal condyle, owing to the greater protection which it enjoys is far less frequently fractured than the outer condyle. The diagnosis is usually readily made, and is based upon the local swelling, the pain elicited on pressure over the condyle, and the preternatural mobility existing in adduction and hyperextension.

The most difficult fracture for diagnosis is one in which the articular surface of both condyles is severed from the diaphysis—the dia-

condyloid fracture. The fracture occurs wholly within the joint. The diffuse swelling, the great pain and the loss of action motion indicate a severe intraarticular injury. Under anæsthesia a preternatural mobility may be demonstrated. Occasionally the edge of the fragment may be felt behind and under the external condyle.

The fracture described by Kocher, finally, is practically a partial diacondyloid fracture. It is a fracture of that portion of the condyloid cartilage articulating with the head of the radius. The diagnosis rests upon the fact principally that the loose cartilage gives the common symptoms of the same condition in the knee joint.

The coronoid process of the ulna is occasionally fractured and the diagnosis is not always readily made. The process is well protected but may be fractured by a dislocation of the forearm backward. All the fixed points being in their respective normal position, pain on flexion and extension, swelling in the fold anterior to the joint are the data which characterize this fracture. It is not of great importance.

Direct application of force to the olecranon in its exposed position make fracture of this bone comparatively common. The symptoms are very obvious. The patient holds his injured arm with his other hand. Pain may be almost absent. Flexion may be executed with small effort, but extension is practically lost.

The triceps frequently draw the fragment upward, where it can be felt and the diagnosis thus clinched.

A fracture of the head of the radius may occur when the head is driven against the external condyle. The condyle withstands the shock, but a portion of the head of the radius is fractured off as with a chisel. Flexion and extension are not interfered with, but pronation and supination is painful. Further, the portion of the head fractured does not rotate. Frequently the split between the piece and the bone can be felt, especially when the bleeding into the joint has not been excessive.

SOCIETY PROCEEDINGS

Fort Wayne Medical Society.

Meeting of April 11, 1905.

Meeting called to order by Vice-President M. I. Rosenthal, with thirty members and guests present. Minutes of previous two meetings read and approved as read.

CLINICAL CASES:—Case 1. *Inguinal Hernia in a Child.* Dr. M. F. Porter reported a case of inguinal hernia in a child six years of age. The hernia consisted of the secum and appendix. The case was reported on account of its rarity.

Case 2. *Atrophic Appendix.* Dr. C. E. Barnett reported a case of atrophic appendix and exhibited specimen. The appendix was about one inch long and had been removed from an adult female patient.

Case 3. *Papilloma of the Ovary.* Dr. M. I. Rosenthal reported a case of papilloma of the ovary which was nodular in appearance and seemed to fluctuate. Two small blood vessels ran along the tumor, and one end was quite cystic and about to rupture. There were no adhesions. Dr. Rosenthal said that he wished to emphasize the importance of removing these growths early, as delays are dangerous.

Case 4. *Ectopic Gestation.* Dr. M. I. Rosenthal reported that he had recently operated a patient for ectopic gestation within two hours after having the first sudden and sharp pain in the abdomen in the midst of health. Patient had not menstruated as freely as usual during the last period, but otherwise was fairly well. When first seen patient was exsanguinated from internal hemorrhage. Was given hypodermic of morphine and ether anæsthesia. The operative field and the patient was covered with a sterile sheet, and the operation performed through the sheet, as time did not permit the ordinary surgical precautions. The time of operation and closing of wound was seven minutes. The left tube was ligated and a hematoma of the right ovary removed. Abdomen was found flooded with blood.

PAPERS:—No. 1. *Fractures about the Elbow* was the title of a paper by Dr. H. A. Duemling. (The paper appears in full in this number of the Journal-Magazine).

No. 2. *Fractures of the Clavicle*, by Dr. J. C. Wallace. A short

description of the clavicle and its relations was given. To prevent fractures of the clavicle in children the essayist considered it advisable for mothers and nurses to be cautioned about rough handling of children and infants. Fractures of the clavicle at birth may be prevented by more care on the part of the surgeon in attendance during labor.

He spoke of the advisability of thorough examination of children injured about the shoulder.

In treating fractures of the clavicle the physician should satisfy himself as nearly as possible, without injury to the patient, as to the exact point of the fracture and look carefully for any complication. His duty then is to restore the bone as nearly as he can to its former place. Having done this he must retain the bone in place by bandages or appliances for that purpose. The displacement in fracture of the clavicle throws the shoulder downward, forward and inward. Therefore the surgeon should put the shoulder, and with it the outer fragments, upwards, backwards and outward where they should be retained until union takes place. In children union is quite firm in about three weeks, while in adults it requires about four weeks. He then described the methods of Sayre, Velpeau and Bryant in treating these cases. He favored the use of the figure of eight bandage, which, crossing in the back and over each shoulder, throws the shoulder backward and upward so that a fractured clavicle is retained in proper position.

No. 3. *Fracture of the Patella* was the title of a paper by Dr. C. E. Barnett. He said that the importance that comes from fracture of the patella was because the patella is the anterior bony portion of the knee joint, and injury to it would necessarily complicate the joint. He said that these fractures fill an insignificant part in the sum total of fractures of the bones of the body. Direct violence and muscular action are causes for fracture, but he said that he thought muscular action plays the most important part, even in the majority of cases where direct violence is applied, and that muscular action alone accomplishes a fracture in those cases where the bone is pathologic.

The symptoms which follow such a fracture are lack of extension of the leg and deformity of the patella. The separation of the fragments should not necessarily exceed one-half inch, and if the case is seen prior to extensive swelling, the diagnosis is easy.

There are two methods of treatment; the open method or arthrot-

omy, and the closed method or treatment with external appliances. The essayist said that with a favorable subject he would consider arthrotomy more favorable for the following reasons: First, with perfect surgery there is no danger of joint infection; second, perfect apposition of fragments is possible and should be brought about; third, the capsule which drops between fractured ends would be reunited and thereby prevent fibrous union which happens in the major portion of cases in which the closed method is used; fourth, the joint cavity would be cleared of blood clots which are a menace to it; fifth, motion could be given the joint much earlier.

Many appliances are recommended for treatment by the closed method, but the essayist said that he considered such methods antiquated. A plaster paris splint seems to answer every want that any appliance can fill. The essayist said that he had had only one case, which was reported in full. Extension with the application of a plaster cast gave the patient a perfectly useful leg.

DISCUSSIONS:—Dr. M. F. Porter said regarding injuries of the elbow joint that the exaggerated lateral motion at the elbow indicates the location of the fracture.

Concerning the method of treatment of cases of fracture of the clavicle in women and girls, especially those who may have occasion to wear full dress, it has been his custom to apply a splint to the back of the patient something like the shape of a hat. The object of the crown of the hat is to hold the wings of the scapula in close apposition to the thorax and thus the shoulders are held well back. To this dressing he adds a sling under the elbow. In most cases he has used an ordinary dressing such as Sayres, while in others he has treated them without any dressing. He has never seen any case in which he thought it necessary to treat it by the open method.

With reference to fracture of the patella he said that he wished to take exception to the open method treatment. He quoted the discussion which occurred among surgeons in the Academy of Medicine in New York on this subject in which the consensus of opinion was against the open method unless there was a failure of the closed method. The simplest and most effective dressing is a splint made from a cigar box lid in which an opening is made sufficient to allow the protrusion and yet the fixation of the patella. This is secured by a bandage after the patella has been fixed in its position. He said that he was not much of a friend of the plaster of paris dressing, as it covers up what you want to look at.

Dr. C. B. Stemen said that in most cases of fracture above the elbow joint he had found some difficulty in making a diagnosis, and for that reason he would earnestly urge the advisability of using anæsthesia for the purpose of permitting a thorough and complete examination.

He said that he had had very few fractures of the clavicle heal without some difficulty. Sayres' dressing has given him the best result, though this is sometimes modified to suit individual cases.

In fractures of the patella he draws the parts together with adhesive plaster, then uses a figure of eight bandage to hold in position.

He said that he had had one case of death as a result of injury to the subclavian vein from fracture of the clavicle. After a few days there was thrombosis extending to the heart, causing the death of the patient. No postmortem was permitted.

Dr. E. J. McOscar said that in order to diagnose injuries of the elbow joint properly it is important that we know the normal elbow thoroughly. The trouble is that too many physicians are not thoroughly familiar with the joint, its anatomical relations and functions. He said that he believed that it is right to dress the fracture of the internal condyle in extension.

With reference to fractures of the patella he thought that the largest number of them come from direct violence rather than from muscular action.

Dr. M. I. Rosenthal described a splint for holding fragments of the patella together which was devised by his father, Dr. I. M. Rosenthal. The splint is similar to that described by Dr. Porter except that it is made of heavy sole leather, divided into two cup shape parts which may be drawn together by buckle and strap, thus fixing the patella, after which the splint may be strapped to the leg in the usual way.

Dr. G. L. Greenewalt said that he had had a fracture of the elbow of the Y and T variety seven or eight years ago. There was excessive hemorrhage nearly through the skin, and the internal condyle was movable, and incision had to be made to turn out the clot. The x-ray proved valuable in verifying the diagnosis. The case was treated in extension for six weeks.

In fracture of the clavicle it is well to become acquainted with a good form of dressing and stick to it.

He said that he had had one case of fracture of the patella in a tuberculous patient in which a posterior splint was used but the

fragments could not be brought together. The fracture was produced by muscular action. He said he preferred adhesive plaster and posterior splints to the so-called horse-shoe splints.

Dr. H. A. Breuggeman said that in the large hospitals in Chicago it is the rule not to do an operation on a blow fracture. If the fracture is due to indirect violence it is a rule to operate.

Dr. C. H. English advised the use of the x-ray in all fractures, and particularly those accompanied by hemorrhage and swelling.

Dr. H. A. Deumling, in closing, said that he should be very careful and not overload our offices with useless splints. He said that he had seen a case in which there was congenital absence of the clavicle; there simply being a ligamentous band where the clavicle should be. It is his usual custom to teach his students at the medical college that Poupart's ligament and the clavicle are analagous.

Dr. J. C. Wallace, in closing, referred to a fracture of the patella he had treated with adhesive strips and posterior splints and had a very good result.

Dr. Chas. E. Barnett, in closing, said that we should not be afraid of arthrotomy. He has never yet had a stiff knee as a result of the open method of treatment.

Dr. Albert E. Bulson, Jr., then presented the following amendment to Section 4 Chapter 1 of the By-Laws:

Any legally registered physician not residing and practicing in Allen County, who is of good moral and professional standing and who does not support or practice, or claim to practice an exclusive system of medicine, and who is a member in good standing of the County Medical Society of the county in which he lives, may become a non-resident member of this society in the same manner as a physician living in this county, and as a non-resident member shall be entitled to all the rights and privileges of regular members except the right and privilege to vote, to be elected an officer of this society, or secure representation in the Indiana State Medical Association through membership in this society. This non-resident membership shall constantly be contingent upon membership in the county medical society of the county in which the member resides, and in case his membership in the county medical society in the county in which he resides ceases or is interrupted he shall from that time cease to hold non-resident membership in this society.

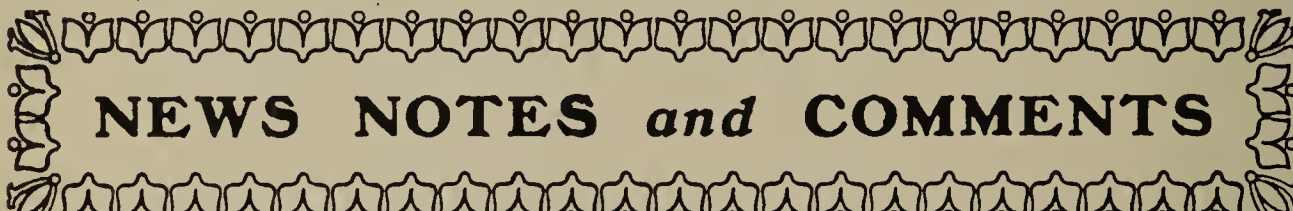
A committee composed of Drs. Bulson, Porter, Duemling, Swer-

ingen and Barnett was appointed to make arrangements for the entertainment of the Northern Tri-State Medical Association.

The papers of Drs. Bulson and Rosenthal were referred to the State Medical Association.

Adjourned.

J. C. WALLACE, Sec'y.



NEWS NOTES and COMMENTS

The New United States Pharmacopoeia.

The committee of revision of the Pharmacopœia of the United States of America has completed its work, and the volume which is to serve from 1900 to 1910 will soon come from the press of the J. B. Lippincott Co. Many changes have been made, but of especial interest are those which conform to the standards adopted by the International Conference on Potent Remedies, held in Brussels in September 1902, the object being to make uniform the strength of potent remedies in all parts of the world. The strength of tincture of aconite has been reduced from 35% to 10%; that of tincture of veratrum from 40% to 10%. The strength of tincture of strophanthus has been increased from 5% to 10%. With these and other changes the Pharmacopœia becomes a much more valuable and reliable work than ever before.

Retraction Demanded.

The California State Journal of Medicine, the official organ of the California State Medical Association, has apparently been posing as a medical censor and not sufficiently careful as to the basis of criticism of medical journals and medical men. Not satisfied with complaining about the editorial management of the *Journal of the A. M. A.* and several other prominent medical weeklies, it has seen fit to publish some statements regarding the *New York Medical Journal* which have been considered false and libelous. Accordingly the attorneys for the *New York Medical Journal* have demanded editorial retraction under penalty of suit for libel. It is hoped that the editor of the *California State Journal of Medicine* will recognize

the justice of the demand, and comply with it, and hereafter be a little more temperate in editorial utterances.

Reid Memorial Hospital.

The medical profession of Richmond, Indiana, sent out invitations for the opening of the new Reid Memorial Hospital at Richmond, which occurred on August 10th. The program consisted of clinical lectures and addresses by Dr. A. J. Ochsner, Professor of Surgery at Rush Medical College, Chicago, and Dr. George W. McCaskey, Professor of Clinical Medicine in the Fort Wayne College of Medicine, Fort Wayne, Indiana. The invited guests were tendered a reception and supper on the lawn in the evening.

Personals.

Dr. Herman A. Griebel, a member of the faculty of the Fort Wayne College of Medicine, holding the chair of bacteriology and histology, has resigned his position and hereafter will devote his entire time to his practice.

Dr. Otto H. Swantusch, of Metz, Ind., and Miss Augusta M. Berry, of Fort Wayne, were recently married. The groom graduated from the Fort Wayne College of Medicine last year, and was an interne at the Saint Joseph hospital during his senior year.

Dr. James M. Squires, the well known physician of Churubusco, Ind., and Miss Margaret Snyder, of New Era, Ind., were married at the home of the bride on June 28. They will be at home in Churubusco on and after December 1st.

Dr. Wm. H. Myers, Fort Wayne, has re-opened an office on Broadway for the practice of medicine and surgery.

Dr. Henry Ranke, Fort Wayne, has returned from a vacation spent at Atlantic City and other Eastern seaside resorts.

Dr. Garrett Sweringen, a graduate of the Fort Wayne College of Medicine and subsequently a graduate of the University of Pennsylvania, has decided to locate in Fort Wayne, and for the present has an office at 633 West Wayne street.

Drs. Porter, Kane, McCaskey, Greenawalt, McOscar, W. D. Calvin. J. C. Calvin and Bulson have returned from a trip to the Pacific coast where they went to attend the annual meeting of the American Medical Association at Portland. Dr. Porter presented a paper

before the Section of Diseases of Women, and Dr. Bulson presented a paper before the Section on Diseases of the Eye. Dr. Bulson was re-elected secretary of his section. Dr. McOscar continued his trip to the Hawaiian Islands. The remainder of the party visited interesting points in the Canadian Rockies, the Yellowstone Park, and on the Pacific coast.

Dr. H. G. Merz, Fort Wayne, has removed his office to 110-112 West Wayne street.

MEDICAL REVIEWS

Department of Medicine and Therapeutics

In Charge of George W. McCaskey, A. M., M. D.

Professor of Clinical Medicine in the Fort Wayne College of Medicine, Ft. Wayne, Ind.

Experiments Relative to Constipation.

Glaesner (*Wiener Klinische Wochenschrift*) reports a series of experiments relative to constipation produced artificially in animals. In the first series, dogs were given large doses of opium, which limited the action of the bowels to once in three or four days. In these cases there were practically no changes in the urine, nor any constitutional symptoms.

In the second series of experiments he endeavored to produce constipation by means of intestinal stenosis, tying a ligature around the small intestine so as to leave only a small opening. But this method also failed to produce a more obstinate constipation. In the third series the desired results were met with. Dogs which had been on a special diet, and under strict observation, until it was determined that the amount of nitrogen ingested corresponded with the amount excreted, were operated upon as follows: A section of small intestine forty c. m. long was divided at both ends and reversed, the lower end being fastened above and the upper end of the section to the loop below, thereby breaking the chain of peristalsis at that point. The dogs rapidly recovered from the operation and movements of the bowels secured once every ten or twelve days. The ingesta and excreta were carefully observed, and it was found that the nitrogen and ammonia salts excreted in the fæces gradually decreased from the time of the operation, while they increased correspondingly in the urine. The dogs gradually lost in weight,

developed a marked cachexia, and finally died. This the author attributed to an absorption of toxins. He believes that certain gastrointestinal disturbances in children, accompanied by constitutional symptoms, can be attributed to stagnation of the feces, and that if the excreta were carefully examined in these cases, the diagnosis could be made readily.—*Medical Progress*, August, 1905.

Cholelithiasis.

In an excellent review of this subject Dr. Ruoff says that "The microorganisms capable of producing gallstones are the *Bacteria coli commune*, *typhosum*, *Staphylococcus pyogenes aureus*, and *Bacillus subtilis*. The influence of appendicitis, peritonitis, and salpingitis is suggestive. Any inflammation of infective character, no matter how remote from the gall bladder, predisposes to the formation of gallstones."

He also quotes quite briefly the following conclusions by Moynihan.

1. The chief characteristic of gallstones, cholesterin, and bilirubin-calcium, are produced by subacute inflammatory changes in the membrana mucosa of the gall bladder, resulting in a disintegration of the epithelium and increased production of mucus.

2. That any agent capable of disturbing the motility of the bile through the ducts favors the introduction of microorganisms.

3. That the injection of virulent microorganisms into the gall bladder, produces only a violent cholecystitis or cholangitis, with negative results.

4. That the injection of attenuated cultures causes no change provided the drainage from the bladder is free.

5. Biliary stasis from the introduction of sterile foreign bodies does not occur; but will if the foreign body is infected.

6. That clumping or agglutinating of *Bacterium typhosum* in the gall bladder may account for the occurrence of cholelithiasis following typhoid.

In cholelithiasis we usually find such well defined and characteristic symptoms that the diagnosis is easy and comparatively certain. And yet embarrassing mistakes have been made by the internist as well as the surgeon. There is a certain class of patients afflicted with gall stones who never suffer any discomforts, the presence of the stones being discovered by chance upon autopsy. In such cases the concretions have been very slow in forming; never causing any interference or exciting any inflammation. In other cases gall stones may cause vague symptoms of dyspepsia, or disagreeable sensations in the abdomen or liver; but these symptoms are so transitory and insignificant as to not warrant a definite diagnosis. In the third class of patients gall stones cause severe, and, at times almost fatal illness. It is this class we most commonly meet.

DEPARTMENT OF MATERIA MEDICA, THERAPEUTICS AND PEDIATRICS

In Charge of Budd Van Sweringen, M. D.
Professor of Theory and Practice of Medicine and Clinical Medicine in the Fort
Wayne College of Medicine.

Bromipin in Epilepsy.

Thomas P. Prout, *Am. Med.*, July 22, 1905, commends bromipin (Merck) as being especially valuable in the treatment of epilepsy. It is a 10% solution of bromine in oil of sesame. It is non-irritating and slightly laxative, while the oil has a nutritive value. It may be emulsified and flavored with peppermint or wintergreen to cover the taste.

Epilepsy and Eye-Strain.

In 1902 Drs. Gould and Bennett were given the opportunity of demonstrating their contention that epilepsy was very frequently due to eye strain by refracting many of the cases in the Craig Colony for Epileptics. The following editorial in the *New York Med. Jour.* July 29, 1905, deals with the results of the experiment:

"Seventy-eight epileptics between the ages of 10 and 59 years were first selected from the eight hundred in the colony as suitable for the experiment. Ten of these were then excluded, three because no fault could be found with their eyes. The remaining sixty-eight were prescribed for and wore their glasses one year, at the end of which time their condition was reported by the superintendent of the colony to be one arrest in which cure seems probable, five previous arrests possibly sustained through the use of glasses, apparent decrease in attacks in eleven cases, attacks increased in thirty-three cases, and no change in attacks in sixteen cases. When it is borne in mind that Dr. Spratling states in his report, published in *American Medicine* for April 9, 1904, that five per cent of chronic cases are cured at the Craig Colony without attention to the ocular errors if we understand the report correctly, it is difficult to see in these figures any evidence in favor of the theory that epilepsy may be cured by treatment directed to the eyes. Dr. Spratling says: 'I have no hesitancy in declaring that if the Craig Colony could today admit one-half its patients before the disease is chronic, or before it has existed more than a year, its rate of recoveries could easily be doubled

or trebled. Personally I deeply regret that the experiment so carefully, and scientifically made by Dr. Gould and Dr. Bennett did not yield better results. At the same time it strengthens my conviction that epilepsy is not a single prescription disease, so to speak—that the correction of the abnormalities of the eye alone is not any more likely to cure it than are surgical measures directed against the brain, from which so much was at one time hoped for, but from which we now expect so little.’ ”

The Treatment of Pruritis Ani.

Lewis H. Adler, *New York Med. Jour.* July 29, 1905, after mentioning the various causes for pruritis ani, the removal of which is necessary to cure, such as leucorrhœa, worms, pediculi, improper diet, hemorrhoids, polypoid growths, fissure and fistula, diarrhœa, erythema, herpes, eczema, constipation, ulceration, etc., etc., and its presence as a symptom of some constitutional state as diabetes or derangement of the liver, recommends strong silver solutions (960 grains of the nitrate to the fluid ounce) for the remainder.

It may be necessary to apply this two or three times at intervals of four days before the desired result is obtained. On the intervening days the official citrine ointment (ung. hydrarg. nitratis) is kept applied in full strength.

He claims better results from this treatment than from any other he has used but says the treatment may have to be continued for six months before cure is obtained.

The use of the nitrate in the above strength softens the skin and usually lessens the itching decidedly.

DEPARTMENT OF SURGERY GYNAECOLOGY and OBSTETRICS

In Charge of Miles F. Porter, A. M., M. D.
Professor of Surgery and Gynæcology in the Fort Wayne College of Medicine,

Cause of Appendicitis.

A. F. A. King (*Washington Med. Annals*, Dec. 5, 1904) contends that trauma produced by the psoas muscle is the chief cause of appendicitis. According to elaborate tables he shows a very striking chronological coincidence in the increasing number of appendicitis

cases and the increasing use of the bicycle. Very young children don't have appendicitis and don't use the bicycle. (Byron Robinson was the first, I think, to promulgate the theory that appendicitis was the result of trauma produced by the psoas muscle. Jos. Price long ago referred to the significant fact that active individuals, athletes especially, were particularly prone to appendicitis. The truth is perhaps that trauma is an important etiological factor in appendicitis; that in some cases the psoas muscle inflicts the trauma; that athletics of all kinds and bicycle riding in particular, predisposes to trauma of this kind; that in some cases the trauma comes from without a blow or fall, and in others comes from within the intestine, imitating ingesta.—Ed.)

Surgery of the Prostate.

The April number of the *Annals of Surgery* is occupied chiefly with articles on the diseases of the prostate and their treatment. All in all the various papers, eleven in number, cover the subject quite thoroughly and make of this number of the *Annals* a very valuable monograph on the prostate. One of the most interesting of these papers, if not the most valuable from a scientific standpoint, is that by Dr. Eugene Fuller, of New York, on the "Question of Priority in the Adoption of the Method of Total Enucleation, Suprapubically, of the Hypertrophied Prostate," in which Dr. Fuller clearly establishes his claim of priority.

It seems that Dr. Ramon Guiteras, of N. Y., met Dr. Freyer, London, in August, 1900, and described to him Fuller's operation, together with Guiteras' modification of it which consisted in lifting the prostate with the finger in the rectum instead of lifting it by pressure on the perineum as Fuller did. The following November Freyer made his first operation using the modification of Guiteras, and on June 29, 1901, delivered a clinical lecture on total extirpation of the prostate taking credit to himself for having originated the method and entirely ignoring the work of Guiteras and Fuller.

Dr. H. H. Young writes on "Conservative Perineal Prostatectomy" and reports most excellent results in seventy-five cases. The principal point in his operation consists in enucleating the prostatic lobes through lateral incisions into the capsule thus avoiding injury to the prostatic urethra and the ejaculating ducts. In a large proportion of the cases the sexual power was maintained. There were no deaths due to the operation but in four cases death

occurred two weeks or more after the operation from other causes such as uremia, pneumonia and pulmonary embolism.

"Prostatism Without Enlargement of the Prostate" is the title of a paper by Dr. C. H. Chetwood. The symptoms are due to contraction of the vesical neck, and the absence of the usual signs of enlargement of the symptoms in prostatism makes the diagnosis rather easy. Incision by the galvano cautery is the treatment advised. The writer of this review has met with one case of this kind which was cured by simple incision. Dr. Young prefers incision with the cautery on account of the danger of hemorrhage.

Dr. Joseph Weiner, Jr., strongly advocates the suprapubic operation under nitrous oxide anæsthesia. He says the suprapubic operation is applicable in all cases. He has done this operation under nitrous oxide anæsthesia eleven times without mortality. Instrumentation of the urethra or bladder prior to operation is strongly condemned.

Treatment of Cancer of the Cervix Uteri in Advanced Stages.

J. Wesley Bovee (*American Medicine*, Jan. 7, 1905) says that severe surgical operations involving appreciable mortality rates or a marked degree of additional suffering should not be employed in the treatment of carcinoma of the cervix uteri, except in very early cases.

According to the reports of the exhaustive microscopic examinations in serial sections of the tissue surrounding the uterus in cancer of the cervix, we have no means of knowing before operation that eradication is certain in any given case of this disease, and hence such attempts must be reserved for the very earliest and most promising ones.

The galvanocautery offers the best prospects for prolonging life, relieving pain, and lessening discharges in all other cases.—*Medical Age*, Feb., 1905.

Gall Bladder Through Foramen in Liver.

Dr. J. C. O'Day, of Oil City, Pa., reports (*Jour. A. M. A.*, April 22) a case in which the fundus of the gall bladder was found completely surrounded by liver substance.

DEPARTMENT OF OPHTHALMOLOGY OTOLOGY, LARYNGOLOGY & RHINOLOGY

In Charge of Albert E. Bulson, Jr., B. S., M. D.

Oculist and Aurist for St. Vincent's Orphan Asylum, the Allen County Orphan Asylum and the U. S. Pension Bureau for Northern Indiana and Northern Ohio; Professor of Ophthalmology in the Fort Wayne College of Medicine, Fort Wayne, Indiana.

The Etiology and Treatment of Iritis.

At a recent meeting of the Wills' Hospital Ophthalmic Society, Dr. S. D. Risley spoke of the etiology of iritis. It usually begins, he said, with congestion of the uveal tract, exudates taking place from diapedesis. The form of the disease depends upon the character and the extent of the exudate. An embryologic study of the uveal tract shows that it is a mesodermic structure, and that it is therefore subject to the same dyscrasies that other mesodermic structures are. The classification of the disease may be considered first from the pathological peculiarities depending upon the character of the exudate—as serous, plastic, and purulent; or there may be a clinical classification, or an etiological one. In the first, it is hard to draw any hard and fast line of difference. The etiologic classification is by far the best. The frequency of cause is as follows: syphilis, rheumatism, and traumatism.

The irites which are due to rheumatism or syphilis are both of the plastic variety. The serous form occurs in poorly fed people as a rule. The suppurative type is associated with two factors: that which is dependent upon ulcerative conditions of the cornea, and that which is due to traumatism in which bacteria have been carried in to the eye ball. In a few instances he has seen an iritis associated with an endometritis, and in one case with gonorrhea. He stated that foreign writers had published a great many cases which were dependent upon the presence of tubercle bacilli, but he had not personally ever seen an instance in which he could with certainty say that the condition was due to that cause. He had seen iritis associated with disease of the ethmoid sinuses and swollen turbinates.

Dr. Charles A. Oliver spoke on the treatment of iritis. The cases, he said, can be combated successfully when recognized early. In his practice he had found that the proper thing to do at the first visit is to alternate the various iridoplegics and cycloplegics, commencing with scopolamine, and later continuing with atropine. He

never employed cocaine for better endosmosis of the other cycloplegic agents if there was any danger of infection. He believed it better to place a cycloplegic agent in the other eye whenever possible.

He had found heat very useful. He had learned to depend a great deal upon the judicious employment of dionin. He had not seen much good in the use of subconjunctival injections though he had faithfully and judiciously employed them in the correct manner. General therapy in the endogenous forms of the disease must be applied to successfully combat the condition. In syphilis, he relied upon the careful use of protoiodide of mercury and mercurial injections. He had permanently relieved the iris condition in two undoubted cases of tubercular iritis by injections of antituberculin. In non-infected traumatic iritis he made it an unalterable rule if possible, to excise protuberant bruised areas of iris tissue. In the infected forms of ectogeneous type, he had had good results of saving more or less useful eyeballs by incision, removal of infectious material—local application of formalin and iodoform with the insertion of Kalt's sutures through a peripherally placed central section. Iridectomy for mechanical purposes—but not in the sympathetic form of the disease, had proved itself of much value in the chronic form of the disease.

Best Method of Anesthetizing Children.

There seems to be no consensus of opinion on this subject. Dr. S. J. Kopetsky, anesthetist to the Harlem Hospital, New York, combats the idea that chloroform is the best anesthetic for children. He says that cardiac failure may set in at the very beginning of the anesthesia, when the children begin to struggle. Death may occur suddenly without warning. Ether is less dangerous, but the best method of anesthetizing children is by the aid of nitrous oxide and ether. By preceding ether with nitrous oxide a less amount of ether is required, the after effects thus being diminished.—*Med. Times*, August, 1904.

The Correction of Nasal Deformities by Subcutaneous Operations; a Further Contribution.

J. O. Roe presents this paper, which contains a description of the operative technique employed in correcting seven cases of extreme or unusual deformity of the nose, due to disease or accident of various sorts. The steps employed in the different cases are too complex

to permit of description in brief, but the underlying principle of the author's methods consists in doing as much of the work as possible subcutaneously, so as to avoid scarring of the skin, and he has been able to develop this plan to a remarkable degree. The "before and after" appearance of the patients is illustrated by a series of twenty-one photographs. The author points out the importance to the individual of having such deformities corrected, and his results show that by the exercise of sufficient ingenuity and the most careful attention to detail it is possible to relieve patients of a lifelong disfigurement which forms a source of embarrassment to them, often amounting to positive torture.—*Medical Record*, July 1, 1905.

MISCELLANEOUS SELECTIONS

INTESTINAL ULCERATION,

By A. F. Foye, M. D., Washington, D. C.

The patient in this case was a woman 82 years old. Her trouble was of several years' standing, during which time she had been unsuccessfully treated for various forms of gastro-intestinal affections. I found that there was a great deal of pain, at times very acute, in the region of the duodenum and a careful examination of the daily stools showed a number of black crusts which, with other symptoms, indicated an ulcer. As there was much acid fermentation and gastric disturbance, I thought the use of Glyco-Thymoline would be effective and began with tablespoonful doses every three hours. The results were wonderful. Not only were the gastric conditions corrected speedily, but the pain and soreness was lessened in the duodenal tract and the quantity of black crusts in the stools greatly lessened. I had the patient under the care of a trained nurse and told her to keep the Glyco-Thymoline treatment up and closely watch the stools and report to me daily. This was done and the improvement steadily continued until, after some three weeks' treatment, there was no pain nor soreness and no trace of the crusts. Her appetite had returned and she could digest and assimilate her food without any distress, something she had been unable to do for a number of years. After another week or so I found that every indication pointed to a cure and discontinued the treatment. That was over a year ago. She has not had the slightest return of the bad symptoms and her general condition is remarkably good for a woman of her age. She could not have lived six months had her

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EDITORIALS

Prevention of the Perpetuation of Disease.

Under date of May 19, 1905, United States Consul E. Theophilus Liefeld, Freiburg, Germany, transmits from the London Daily Mail of May 18, the following contribution by a physician on the increase of insanity in London:

To prevent the perpetuation of disease is one of the most important problems that confront the medical profession, and the most potent cause—the marriage of diseased individuals—it has, so far, been impossible to check.

In the United States the subject is being grappled with, and several States have passed bills which restrict the marriage of persons afflicted with either mental or physical diseases. It is doubtful, however, if this legislative action will be successful.

For us the importance of the question is manifest when we consider the number of asylums which are being constructed in Great Britain for the housing of lunatics. In the area of London, administered by the London county council, seven large asylums, each containing over 2,000 pauper patients, already exist. As each costs about £500,000 (\$2,433,250) to build, and requires some £80,000 (\$389,320) per annum for its successful management, the burden which the rate-payers—many of whom are workmen with large families—have to bear is very great, nor can they ever have the comfort of hoping that it will lessen in the future, for it has been calculated that in London the yearly increase of patients will be 500.

Out of a population of 40,000,000 there are 145,000 persons (England 108,000, Scotland 16,000, Ireland 21,000) who are insane, giving an average of 1 insane person to every 276 persons of the population. It is, moreover, asserted that for every certified insane person there is probably another who is suffering from a threatened attack or who may be harmless and yet insane.

It has been recognized that the great cause predisposing to insanity is heredity, but unfortunately it is impossible to obtain any very reliable statistics on the subject. Maudsley says that the most careful researches agree to fix heredity as certainly the cause of not lower than one-fourth, probably as high as one-half, possibly as high as three-fourths of the cases.

It can not be doubted that the tendency of the age is toward the cultivation and spread of these hereditary diseases, for it bars the course of nature and prevents the operation of those laws which weed out and exterminate the diseases in every grade of life. In savage races natural selection remorselessly cuts down the diseased, the race does not become contaminated, and thus a high standard of health is maintained. We, on the other hand, surround the weaklings with an artificial environment, and we struggle with all our strength against the law which condemns the unfit to extinction, but nature eventually takes her revenge on the suffering beings who fret and weep their hour on her stage.

I do not for an instant intend to question the righteousness of these endeavors of civilized man on behalf of his afflicted brother. One can but admire the beauty of the unselfish spirit which prompts his action, but it is right to point out that by these means disease is propagated, the contamination of the race assured, and the care of useless citizens made a heavy charge on the community.

As heredity plays such an important part in the question under consideration, it will perhaps not be out of place to touch lightly on the subject. Ideally considered, heredity would simply be the reproduction of like by like, but this is purely theoretical, otherwise the primitive types would remain, being continually reproduced; but the phenomena of life do not lend themselves to such mathematical precision, and as we ascend from the vegetable world to the higher animals we meet with so many exceptions that it almost seems as though all law had vanished.

If a young man becomes insane he is treated in an asylum, and as soon as he recovers he is discharged, however bad his family history may be. Being naturally impulsive, he gets married, and when he returns to the asylum, as he almost always does, he is the father of two or three children. Again he recovers, and again he returns home to beget a tainted race. No asylum is without scores of such cases, and they make up a large part of our moving population—men who beget families in the intervals between attacks of mania or melancholia.

Man is subject to all the general laws of nature. The law of heredity is one of these from which he can not escape; yet while he takes the greatest care not to violate this law in the breeding of his cattle and horses, when it becomes a personal question he ignores it. Can nothing be done? As tending to develop physique and to foster a resisting power to disease, I would draw attention to the recommendations of the royal commission as to the importance of physical training and feeding. As to the latter, some steps are being taken officially, but not before they were needed. It might be cheaper in the end to provide, as a charge incident to school management, meals and the preparation and cooking of them for children whose parents are too poor to pay for them. Considering that the children of the present generation will be the parents of the next, this would be a wise expenditure if they were enabled to grow into men and women capable of exercising an intelligent and well-balanced control over their appetites, passions, faculties, and powers.

Physiology should be regularly taught by competent instructors in every school, for "it is only by instilling into the minds of children from their earliest years, and this is quite possible and feasible, the great leading facts and principles of life and health and sanity, that they can learn how to avoid the pitfalls which they will meet in after years." If any advance is to be made in the improvement of the

race by means of deliberate selection, it can only be by a full recognition of the vast importance of the subject, not only on the part of parents and guardians, but on that of the young people themselves.

The enormous power which religious and quasi-religious customs can obtain over a community is illustrated by every tribe and nation throughout the world, and if the vital importance not only of preserving, but of improving the race in its normal, mental, and physical condition was instilled into the minds of our youth with all the fervor that springs of religious convictions, the social sanction is quite powerful enough to do the rest. Many preachers of religion, however, do not always instill this important side of morality into the youth of the land with all the fervor they might. They do not realize, or if they realize it, do not preach it, that sickness of soul is largely resultant from sickness of body.

Whenever the subject of the improvement of the race is raised, it is smiled at as most desirable in itself, and possibly worthy of academic discussion, but absolutely out of the question as a practical problem. A practical problem, it is, however, and must be solved unless we are content to permit ourselves to be destroyed by it. Considering that we are a dominant race, that we possess the greatest Empire the world has ever seen, that we plant our stock all over the world and lay the foundation of future millions of the human race, to no other nation is the question more important.

"Spermatorrhœa."

Strictly speaking, this bugbear of the victims of the advertising quacks who treat "diseases of men" has no existence. That is to say, there is no morbid condition that is correctly denoted by the word "spermatorrhœa," for the term would be applicable only to an almost constant flow of semen from the urethra, and there is no such condition, as is ably pointed out by Dr. Rochet in Lyon Medical for March 5th. It is altogether probable that the quacks endeavor and with too much success, to impress their victims with the idea that any involuntary discharge of semen is significant of a disease that they choose to term "spermatorrhœa" or "seminal weakness," whereas we all know that the occasional lascivious dream that culminates in an ejaculation of semen is strictly speaking physiological.

It is true that a man who has had a gonorrhœa, and supposes himself cured, may lose a drop or two of glairy fluid from the urethra after micturition. It is also true that a like fluid, so far as its gross

characteristics are concerned, may be pressed out from the prostate during defaecation and escape from the meatus urinarius. But in neither case is it seminal fluid that is lost. Semen never dribbles; it is forced out by ejaculation.

But there is such a thing as the irritable urethra, among the symptoms of which may be undue frequency of involuntary emissions, ejaculations on slight material or emotional excitement of the genitals, and premature discharge of the seminal fluid during coitus. For lack of a better and well known name, we may conveniently speak of this condition as "spermatorrhœa." M. Rochet properly insists that it is not a pathological entity, but may be dependent on various local diseased conditions or on any one of a number of morbid states of the nervous system. It may often be cured, but only by doing away with the particular cause on which it depends. Its treatment, therefore, requires all the resources of the skilled physician, and it is not to be overcome by any nostrum.—*New York Medical Journal*.

Is Cancer a Local Disease?

For a long time the profession has considered cancer a local disease, at least in its incipency. From the researches of Moore (*Prac. Royal Soc.* May 24, 1905) there would seem to be good reason for questioning this conclusion. Moore discovered that not only in gastric carcinoma but also in carcinoma located elsewhere in the body there is a diminution of free hydrochloric acid in the stomach. The production of hydrochloric acid in the stomach depends upon the activity of the oxyntic cell of the gastric glands. The materials out of which these cells form hydrochloric acid pre-exist in the blood in the form of chlorine and hydrogen ions. The inability of the local cells to produce acid may depend upon atrophy or upon an absence from the blood stream of the chlorine and hydrogen ions.

That atrophy of the acid cells occurs in gastric cancer it seems reasonable to suppose, but just how a cancer located in a part of the body remote from the stomach could produce such an atrophy does not appear plain. Besides atrophy of the acid cells does not occur in extreme gastric cancer.

It might be supposed that cancer inhibits the action of oxyntic cells but it has been shown that complete removal of a cancer is not followed by an efficient action of these cells.

We come then to the third explanation, which is the one held by Moore, i. e., that there is in cancer a diminution of hydrogen ions in the blood. Whether this diminution of hydrogen ions is only relative or whether it is absolute is not known. That is to say there may be in these cases either an actual lack of hydrogen ions in the blood or there may be an increase in the hydroxyl ions only. In either event the result would be the same for it has been shown that an absolute or relative increase in the hydroxyl ions in the blood diminishes the amount of hydrogen ions.

Loeb's experiments have practically proven that healthy activity of the tissues necessitates healthy blood, i. e., blood chemically normal. This experimenter has shown that a slight increase in the hydroxyl ions of sea water materially increased the development of the eggs of sea urchins. A great addition of alkali to the sea water, on the other hand, stops their growth entirely.

The inherited tendency to cancer and the return of cancer after complete surgical removal would seem to lend color to this view that cancer is, after all, a disease of the blood—that is, a general disease and not a local one.

The fact that there is a diminution of hydrochloric acid in the stomach in patients suffering with cancer is important both from a therapeutic and diagnostic standpoint. Perhaps in suspected malignancy the examination of the stomach secretion may prove a valuable diagnostic aid. Possibly we may by diet or drugs increase the hydrogen ions in the blood and thus accomplish much in the prophylactic or even the curative treatment of cancer. Observations along these lines are worth making.

Clinical experience seems to have proven the curative effects in some instances of electricity and of certain forms of infection in malignant disease.

What chemical change is produced in the blood by erysipelas toxins, for instance, is not known, but that there is produced an acid at the positive pole of a battery and an alkali at the negative pole is well known. It does not seem improbable, therefore, to suppose that the curative effects of electricity and of erysipelas toxins are due to the chemical changes produced by them in the blood and that this change consists in an increase of the hydrogen ions. Investigations with a view of determining the effects of x-rays on the chemistry would be interesting and possibly of much practical value.

M. F. P.

Changes to be Found in the New Pharmacopoeia.

The following letter which explains itself, has been sent to physicians by the Retail Druggists Association, of Fort Wayne. Every prescriber must thoroughly familiarize himself with these changes to avoid costly errors. So also should every prescription clerk that he may not be responsible for a poison case, or a party to it:

FORT WAYNE, August 15th, 1905.

DEAR DOCTOR:—No doubt you know through perusal of the various medical journals that the Pharmacopœia of 1900 (Eighth Decennial Revision) becomes official September 1st of the current year, and in this connection we desire to call your attention to the fact that it would be well for the prescriber to specify U. S. P. 1900 (or as the case may be, U. S. P. 1890) in writing any or all prescriptions containing pharmacopœial substances. We desire to call your particular attention to two most important changes, viz.: Tincture Aconite is now 10 per cent., having been reduced from 35 per cent., and Tincture Stophanthus has been increased to 10 per cent., (formerly five per cent.) thereby creating a source of possibly grave error on the part of either prescriber or dispenser unless the prescriber plainly states which tincture he desires. These remarks apply equally to several of the other tinctures, notably:

	Per Cent. Now.	Per Cent. Formerly.
Belladonna Leaves.....	10	15
Cannabis Indica.....	10	15
Colchicum Seed.....	10	15
Digitalis.....	10	15
Gelsemium.....	10	15
Hyoscyamus.....	10	15
Lobelia.....	10	20
Calabar Bean (Physostigma).....	10	15
Stramonium.....	10	15
Veratrum.....	10	40
Syrup Ferrous Iodide.....	5	10

Among other changes which will prove of interest to our medical friends we note the admission (under their chemical names) of Phenacetine, Sulfonal, Trional, Aristol, Urotropin, etc., and would ask our physician friends to prescribe them under their pharma-

copœial titles. We note also several galencial preparations, viz.: Cataplasm of Kaolin, Elixir, Glycerole and Syrup of the Phosphates of Iron, Quinine and Strychnine, Emulsion of Turpentine, Anti-septic Solution, Compound Solution of Cresol, Solution of Sodium Phosphate, Compound Laxative Pills (A. S. B. and I.) Tincture of Gambir Compound (to replace Tinct. Catechu Co.), as well as several others. For the first time we find dosage admitted to the pharmacopœia under the following distinct declaration: "That neither this convention nor the committee of Revision created by it, intends to have these doses regarded as obligatory on the physician or as forbidding him to exceed them whenever in his judgment this seems advisable." For the first time also, we find Anti-diphtheritic serum, and also Dessicated Suprarenal Glands and Dessicated Tyroid Glands. Several changes in nomenclature are manifest, Acidum Arsenosum and Acidum Chromicum becoming Arseni Trioxidum and Chromii Trioxidum. The name Acidum Carbolicum has been dropped, "Phenol," the more correct chemical name, replacing it.

Trusting that these few remarks have proven interesting to you, and assuring you of our desire to serve you in any way; also trusting to have the pleasure of handling an appreciable quantity of your prescriptions specifying ("U. S. P. 1900.")

We are very truly yours,
RETAIL DRUGGISTS OF FT. WAYNE,
By Edward L. Mertz, Secy.

Who Shall Marry?

Dr. Chas. G. Stockton, in his oration on medicine at the Portland meeting, took up the subject of the delay of old age and the alleviation of senility. At the very outset he pointed out the desirability of good stock being put in one's tissues if a healthful old age is to be attained. This leads at once to the question of who shall marry. How much may one's personal rights be over-riden for the public good?

It will obviously be a long time in the future before it will be possible by law to regulate, effectually, the marriage of persons who should not mate because they can not bring forth good stock.

Dr. Stockton's suggestion is that the profession begin the work of educating the people to the desirability of looking up such questions before marriage and the establishment of an "aristocracy of

health." Thus would arise a generation proud of their inheritance and careful of their marriages so that they might beget children still better physically and mentally than they themselves.

The possibilities of such an "organization" are known to every breeder of stock, and when once pride of ancestry is implanted in a sufficient number of people pride of posterity follows closely. In a comparatively few years an "endless chain" would be formed which would grow with amazing rapidity and need no legislative enactment to prevent such people from propagating disease.

B. VAN S.

ORIGINAL ARTICLES

No paper published or to be published elsewhere as original
will be accepted in this department.

Bright's Disease; Graves' Disease; Motor Neuritis, with Probable Tabes Dorsalis.

A Clinical Lecture Delivered at the Formal Opening of the Reid Memorial Hospital, Richmond, Indiana, before the Hospital Staff and Invited Guests, August 10, 1905,

BY

G. W. McCASKEY, A. M., M. D.

Professor of Clinical Medicine, Fort Wayne College of Medicine,
FORT WAYNE, INDIANA.

GENTLEMEN:—It affords me great pleasure to be present today at the formal opening of this beautiful new hospital with its fifty acre park surrounding it. I appreciate the compliment extended to the Fort Wayne medical profession through myself by inviting me to give the first medical clinic held in the institution. At the same time I feel somewhat embarrassed by the wealth of material furnished by the committee, and the impossibility of properly studying four such important cases in the space of thirty minutes as a proper clinical study of them in accordance with modern scientific methods would be a day's work. It will be necessary, therefore, to simply take the cases in outline and make my remarks of a general character.

BRIGHT'S DISEASE.

Case 1st. The first case, Mr. C. M., aet. 55, a foundry laborer, has been under the care of Dr. G. H. Grant. He was apparently

in good health until the morning of December 6, 1904, when he was found in a comatose condition, moderately cyanosed, breathing heavily. He became conscious in the course of eight or ten hours when he was found to have a ptosis of the left eye and marked weakness of the entire left side. Examination of the urine made at that time revealed what had not been suspected before, namely, renal disease, both albumen and casts being present. The progress of the case from that time to this has been unsatisfactory, there being among other things, evidence of involvement of the third cranial nerve in the form of divergent strabismus which has gradually developed during the last four or five months. The patient tells me that up to the time of this attack the quantity of urine was rather large, but that it has since then decreased, and that he is now passing only about half a pint in the course of twenty-four hours. For some time there has also been a troublesome hacking cough without expectoration. Physical examination shows a moderately enlarged heart, both ventricles sharing in the hypertrophy. An ophthalmoscopic examination made by Dr. D. W. Stevenson shows a normal eye ground with no evidence of retinal hemorrhage.

Case 2d. The next patient, presented through the courtesy of Dr. C. S. Bond, is a physician with a history of eighteen months illness characterized by dyspnoea, cough, general oedema, severe general pains over the body, headache and epistaxis. The urine in this case also was excessive at first and later scanty.

They are both undoubtedly cases of chronic interstitial nephritis, although a little more information could be desired concerning the number and character of the casts as well as on some other points in order to clearly establish the sequence of events. The first case is especially interesting because it is one of those not very rare cases in which the first intimation of a far advanced diffuse arterial disease is received in the form of a brain hemorrhage. The cerebral lesion will be passed by, although not altogether unimportant as we have evidence of secondary degenerative processes around the hemorrhagic focus. This same hemorrhagic tendency due to arterial disease is evidenced in the epistaxis in the second case.

In making the diagnosis of interstitial nephritis we should bear in mind that we can not draw sharply defined distinctions either clinical or pathological between the interstitial and parenchymatous forms of chronic renal disease. One or the other process

may, and usually does, predominate, although there are many cases found in which the morbid processes have apparently gone hand in hand.

In the interstitial type of nephritis in which the predominant change is the connective tissue overgrowth we usually find the renal disease to be only the local manifestation of a widely diffused morbid process which may, and perhaps generally does, involve substantially every organ and blood vessel of the body. The renal lesion itself may be the most conspicuous or a very subordinate incident in the general clinical picture, and only discovered as in case first, by accident. The morbid process in chronic interstitial nephritis considered as a local manifestation of general arteriosclerosis is excited by a variety of toxins circulating in the blood derived largely from the intestines, but partly from perverted metabolic processes. The first effect of these intoxicines is to stimulate the intima of the blood vessels, and through the vasomotor mechanism produce tension of the arteries and a rise in the blood pressure. This rise in the blood pressure is one of the earliest and most important manifestations of the disease. The increased resistance requires increased force to overcome it on the part of the left ventricle which leads to hypertrophy, a condition which is perhaps constantly present at a comparatively early stage in all of these cases. Long before it can be demonstrated by an increased area of cardiac dullness, it may be manifested by an accentuated second sound produced by the recoil of the overdistended aorta which closes the semi lunar valves with a snap. This irritation of the arterial lining soon leads to an inflammatory process which involves first the intima, subsequently the other coats of the blood vessels leading to loss of normal resiliency, and still further overtaxing the left ventricle by an increased peripheral resistance, thus leading to still greater hypertrophy. At first the vascular disturbance is perhaps limited to the systemic circulation, but when this becomes too much embarrassed the return flow from the lungs to the left auricle is interfered with and pulmonary congestion with cough, such as is found in both cases here presented, ensues.

A little later still the embarrassment of pulmonary circulation leads to an increase of work on the part of the right ventricle, and we have hypertrophy occurring as in the first case.

It cannot be too strongly emphasized that if the earlier indica-

tions of arterio-sclerosis were more fully recognized, that chronic interstitial nephritis would be to a large extent a preventable disease. Much can be done after the disease becomes fully established, but the golden opportunity for therapeutics is in the preliminary stages of increased arterial tension with very slight or passing organic changes of any sort. But it will probably continue to be true in the future as it has in the past that our advice will be sought when the renal lesion and the general arterial disease are so far advanced that the symptoms require relief.

The treatment of these cases at this stage may be classified under three heads: First, medicinal; second, hygienic, and third, dietetic.

But little can be said concerning the efficacy of the medicinal treatment of the morbid process in such cases. There is perhaps only one drug which can be expected by analogy to exert any influence of a favorable character. I refer to iodine or iodides in some form. These may be given in such doses as can be well tolerated. Symptomatically the most important medicinal indications are to reduce the excessive arterial tension, and later when the heart begins to flag to improve its tone. Nitroglycerine is perhaps the best remedy with which to meet the first indication and should be given in increasing doses three or four times a day until the blood pressure is brought down to the proper level. Very small doses of digitalis can be given to advantage in conjunction with the nitroglycerine which will enable us to get the full effect of the digitalis upon the heart while the nitroglycerine counteracts the tendency of the digitalis to constrict the small blood vessels which is an objectionable effect of the last named drug.

The hygienic management of these cases is of the utmost importance. They should lead a quiet uneventful life, avoiding exposure and excessive fatigue either mental or bodily in character. Especially in reference to exercise we should remember that acute fatigue is an acute toxæmia and many a fatal attack of so-called uræmic poisoning can be directly traced to either fatigue or exposure. The function of the skin should be stimulated by frequent warm baths, but these must not be carried to the extent of producing enervating and depressing effects upon the patient.

The dietetic management of chronic Bright's disease has undergone a revolution within a decade or two. The starvation regime

so irrational in its conception as applied to a chronic condition, is no longer in vogue. We have found that these patients, unless the kidneys are too greatly compromised, are able to take an ordinary mixed diet, not only with impunity but with great benefit. An excessive milk diet or anything approaching it in character is extremely irrational, as it is not a properly balanced diet, and burdens the digestive organs with an inordinately large amount of fluid. The diet should be plain, easily digested, nutritious, non-stimulating. Meat in moderation is permissible in practically all cases. I have been in the habit of judging as to the extent to which meat can be permitted by giving the patient a single large meal of meat, and watching the resulting urea output. If this shows a sharp rise in keeping with the increased proteid intake, it proves, in my opinion that the kidneys have sufficient secreting capacity to permit of a well balanced dietary into which meat may enter, and the question of diet so far as its proteid content is concerned need not hinge upon renal conditions, but should be regulated in accordance with proper physiological standards in relation to the functional and nutritional state of the entire organism. In other words, the diet should be for the patient, not for the kidneys. The amount of fluid should be moderate, large quantities not being taken at any one time.

In the treatment of the dropsical effusions of chronic Bright's disease perhaps the most valuable recent therapeutic idea is the elimination of salt from the diet of these patients. Its effect upon fluid accumulations in the tissues and serous cavities has been established by abundant experience, and taken in connection with restrictions in the amount of fluid may be regarded as the best possible means we have of dealing with those conditions. Its advantages over hydragogue cathartics and diaphoretics are obvious as it lacks all the objectionable features of those methods, especially the exhaustion incident to their use.

I cannot proceed further into the details of the therapeutical management of these cases, but will simply say that if they are taken early, carefully studied and controlled, there is no reason why they should not live in a fair state of health and usefulness for ten or twenty years.

GRAVES' DISEASE.

Case 3rd. This patient, Miss —, aged 23, has been under the care of Dr. Davis and gives the following history: Her health

had always been reasonably good until the commencement of the present trouble, which dates back about four years. The three prominent symptoms in the case, namely, exophthalmus, thyroid enlargement and tachycardia, began, so far as the patient can determine, almost at the same time. She noticed that her dress collar was a little tighter than usual around the neck; almost at exactly the same time a little disturbance and frequency of heart action, and very shortly thereafter a slight fullness of the eyes. These symptoms kept on increasing until they became quite severe, the thyroid enlargement being somewhat greater than at present, the exophthalmus having remained stationary for some months, or possibly increased a little. The tachycardia has entirely disappeared, the pulse today being 72, and perfectly full and regular without any marked evidence of myocardial degeneration or dilatation as is usual in such cases. The only treatment has been small doses of iodine given internally over a period of about one year, and whether as a consequence or a coincidence, one of the main symptoms, namely the tachycardia, has disappeared and the thyroid enlargement has been markedly reduced. Nevertheless the exophthalmus remains about the same or is somewhat increased. The result is interesting and emphasizes the importance of continuing the iodine treatment in such cases for a long period of time, although it is undoubtedly true that in a considerable proportion of cases it will entirely fail to give us substantial results. Time will not permit a full discussion of the more or less futile therapy of Grave's disease. It is difficult to estimate with precision the results of therapeutic procedures because of the spontaneous fluctuations noted in cases with and without treatment. Two or three such cases have been under my own observation for ten or twelve years and during considerable periods the patients have been apparently well but the symptoms have recurred.

I will only discuss very briefly two remaining points, namely, the pathology and surgical treatment of Grave's disease. The consensus of opinion at the present time appears to be to consider Grave's disease as practically synonymous with chronic thyroid intoxication. This results from either a perversion or a simple increase in the functional activity of the gland. It must be admitted today that so far as the effect of the thyroid secretion is concerned we are absolutely without an antidote for its effects. The only rational treatment, therefore, if this is the dominant fact

in its pathology, is either to modify the function of the gland or remove it in whole or in part. While surgical treatment has not fully met our expectations, I believe it is true that the aid of the surgeon should be frequently invoked in the treatment of this morbid condition. The danger of producing myxedema can be faced with comparative impunity as we have a specific for it and know precisely how to treat it. We can feed such a patient thyroid extract the remainder of his life if necessary, but we have no satisfactory means of controlling thyroid intoxication.

Before advising or even seriously considering surgical treatment, these cases should, of course, be made the subjects of a thorough study from the standpoint of internal medicine. All possible collateral sources of autointoxication should be searched for and if possible, eliminated. This will especially apply to the digestive organs. In short, the entire organism of the patient should be placed upon the highest possible physiological plane coupled with the internal use of iodine in some form or other, and when all these measures have failed, but before the late degenerative myocardial and other changes have taken place, thyroidectomy should be considered.

MOTOR NEURITIS FOLLOWING PTOMAIN POISONING WITH PROBABLE
TABES DORSALIS.

Case 4th. This patient, Mr. N., aged 46, a machinist by occupation, has been under the care of Dr. H. B. Boyd, of Cambridge City, and presents the following history: On the evening of about October 15, 1902, he went to bed in apparently perfect health after partaking of some oysters which he had procured in the market and which were the remnants of an open tub. During the night he was taken violently ill with vomiting and purging which continued several hours. The next day he was very weak, especially in the lower extremities, but was able to go to work in a couple of days and continued to work about ten days. His legs became daily weaker until at the end of that time he was compelled to give up his work. The weakness continued to increase for about a month, since which time it has remained about the same. During the ten days he was at work following the acute illness he felt perfectly well in every respect excepting the weakness of the lower extremities. If he stooped over at his work, would be very likely to pitch forward and fall over, and when carrying anything of

considerable weight would stagger and sometimes nearly fall. During the first two or three weeks of his illness he lost about fifteen pounds in weight indicating some marked disturbance of nutrition. His sexual powers had always been very vigorous and active up to and including the night before the illness, but were practically lost on the following day and have remained so ever since. He has had a little difficulty in urination consisting principally in slowness in starting the urine more noticeable when fatigued. There is no history of anything in the nature of a visceral crisis. The knee jerk is entirely abolished with reinforcement and Romberg symptom well marked.

The pupils are normal and symmetrical in size and respond promptly to light and accommodation. Sensation is perfect over both lower extremities. There has been an entire absence of any sensory disturbance such as girdle sensations, paraesthesia or pain of any character whatever.

There is a somewhat doubtful history of lues at the age of 21. No primary lesions were ever seen, the only symptoms being a marked falling out of the hair which was not complete, and after being clipped, grew out again in a few weeks in a perfectly normal condition. There was no impairment of general health then or at any time up to October, 1902. About six months before the acute attack a callous upon the right great toe became sore, apparently from pressure, and extended into and included the bone requiring amputation at the first joint.

The evidence at hand, owing to the very limited examination possible in the time at my disposal, in this case does not, in my opinion, permit of a positive diagnosis. While I feel confident that the general clinical picture is not due to locomotor ataxia, this disease cannot be positively excluded. The history points to a motor neuritis produced by the ptomaine poisoning in a patient with doubtful luetic history, and the possibility of tabes dorsalis. The loss of the knee jerk would be satisfactorily explained in this way, and of course the motor weakness and incoordination developing in a week's time in a perfectly healthy person following an acute intoxication could not be due to the degenerative changes of locomotor ataxia. More information is absolutely necessary to make a complete diagnosis, and time cannot be taken for the requisite examinations here.

ADDENDUM.

Through the courtesy of Dr. Boyd this patient visited me at my office in Fort Wayne, Aug. 27, 1905. An ophthalmoscopic examination was made and the disk was found normal and atrophy of the optic nerve excluded. The blood examination showed 94% of hemoglobin, 4,500,000 red cells and 6,000 white cells—there being no leucocytosis as is frequently found in chronic syphilis. Only a few drops of urine could be obtained, but this contained albumen, and the patient may possibly have chronic renal disease.

The most important part of the examination was an electrical test of the muscles of the lower extremities which showed a mixed form of degenerative reaction, such as is frequently found months or years after inflammatory involvement of the motor and trophic nerve filaments. Four groups of muscles in each extremity were subjected to the faradic test and also the cathodal closing and anodal closing galvanic reactions. All of the motor points of the lower extremities were not taken. The sartorius, the vastus externus, the tibialis anticus and the gastrocnemius were deemed sufficient, and the opening reactions were not studied.

In the right lower extremity the sartorius gave an intermittent jerky response to the faradic current; cathodal closing, 7 m. a. Anodal closing, 8 m. a. Vastus externus, faradic contraction normal; c. c., 4 m. a.; a. c., 6 1-2 m. a. Tibialis anticus, faradic response sluggish; c. c., 13 m. a., a. c., 12 1-2 m. a. Gastrocnemius, faradic response slow and tremulous; c. c., 10 m. a.; a. c., 13 m. a. Left lower extremity. Sartorius, faradic response irregular; c. c., 8 m. a., a. c., 10 m. a. Vastus externus, faradic response normal; c. c., 5 1-2 m. a., a. c., 4 1-2 m. a. Tibialis anticus, faradic response normal; c. c., 6 1-2 m. a., a. c., 10 m. a. Gastrocnemius, slow tremulous faradic contraction; c. c., 10 m. a., a. c., 7 1-2 m. a.

These anomalies of electrical reactions are never found in simple locomotor ataxia, and can only be the result of a lesion of the lower motor neurons, and with the history of this case there can be no reasonable doubt that some toxic agent produced in connection with the acute illness exerted a selective action upon the motor nerves resulting in an exclusively motor neuritis, or acute degenerative process. Of course this would produce a break in the reflex arc responsible for the knee jerk leading to the abolition of the latter, but one cannot deny the possible absence of the knee jerk prior to that time. The patient's gait, it must be

admitted, resembles that of a tabetic more than of a patient with simple motor weakness; although as pointed out by Lloyd and others the characteristic drop of the toes in neuritis is not always present in which event the distinction would be lacking. Romberg's phenomenon is almost equally a symptom of both diseases. Taking into account all the facts of this case I believe that the clinical diagnosis of an acute toxic lesion of the lower motor neurons is fully sustained, although it is obviously impossible to exclude a pre-existing tabetic condition so long as it offered no manifestation whatever with the exception of the great toe lesion, as such cases are well known to exist; and further, some of the symptoms, especially the loss of knee jerk and the presence of the Romberg sign are equally characteristic of the two diseases in question. If the Argyle-Robertson pupil were present or if there were any sensory manifestations of any kind they would weigh heavily in the balance in favor of locomotor ataxia, but could not even then displace the diagnosis of neuritis as the dominant fact in the clinical picture. It should be added, however, that a more careful examination of the toe reveals a lesion closely resembling the tabetic type of ulceration, making the co-existence of *tabes* quite probable,

In this connection it should be remarked that too great stress is sometimes laid upon the luetic history in establishing the diagnosis of locomotor ataxia. The latter disease is not in any proper sense of the phrase a syphilitic disease. The lesions are not in any proper sense syphilitic in character. All that can be said is that the syphilitic cachexia favors the degenerative process characteristic of locomotor ataxia. It is only necessary to reflect upon the great frequency of syphilitic disease and the comparative infrequency of locomotor ataxia to show how small is the incidence of the latter disease in the total number of syphilitic cases. Nevertheless syphilis is the most frequent antecedent of locomotor ataxia, and probably occurs in more than half of the cases. So far as this case is concerned, it is quite possible that the future may demonstrate that the patient has *tabes dorsalis* as well as motor neuritis.

The prognosis is unfavorable so far as recovery is concerned from any point of view. The patient may live an indefinite time and may get considerably better, but is quite as likely to remain stationary. The treatment should be supporting and alternative

in character including a vigorous course of antisyphilitic treatment carried out for a sufficient length of time to make a satisfactory therapeutic test. Full doses of iodides, if well tolerated, and mercurial inunctions twice a week for a period of two or three months would be sufficient. The general functions of the body should be maintained in the best condition possible under the circumstances, while some form of mild hydrotherapy and general electrical treatments are indicated.

The Diagnosis and Treatment of Ruptured Ectopic Gestation.*

BY

B. VAN SWERINGEN, M. D.

Fort Wayne, Ind.

The text of the few remarks which follow is found in the recital of the following case:

Mrs. M. L., 31 years of age, began menstruating at her regular time on June 30, 1904. On June 28 she again noticed a bloody discharge, this being several days ahead of her regular time. This period kept up for about 10 days, which was longer than she usually menstruated. There was no discharge of shreds or strings.

On July 15 she was taken with a violent, sudden pain in right side, low down, accompanied by feeling of faintness and frequent desire to urinate. She has a daughter 16 years old and gives no history of pregnancy since.

For several weeks she has been having some tingling in the breasts and some secretion. There has also been some slight nausea.

Following this sudden attack of pain on the 15th of July she took her bed. The pain began to subside after a time under the influence of opiates, although it did not completely disappear. On the morning of the 20th I saw her. The vaginal examination disclosed a tumor in the right broad ligament which from the history was thought to be blood.

At the section which I made that night the tumor proved to be blood in the broad ligament from a ruptured tubal gestation sac. The tube also contained about a teaspoonful of pus which escaped during removal. The patient made an ideal recovery.

What deduction may be made from this case?

One other physician who saw this case failed to recognize it, but why, I do not know, as it seemed remarkably plain to me and one

*Read before the Noble County Medical Society

would certainly strongly suspect it from the history alone. It is a good rule to *suspect* rupture of a tubal pregnancy in every case of sudden pain in the lower abdomen in a woman of child-bearing age until such condition can be eliminated.

One must not forget either that the pain of ruptured ectopic gestation may not always be located in the lower abdomen. I have in mind now one case in which the pain so much resembled biliary colic in location and distribution as to be mistaken for it at the time, a mistake seemingly verified by the appearance of jaundice some days later. At the time of the second rupture, a month later, the correct diagnosis was made and operation showed the ruptured tube to be on the left side while all the pain had been on the right.

The diagnosis is made easy if one can get a history of discharge of the decidua or marked irregularity in the menses or increase in amount of the flow and examination shows tumor in the side.

Is drainage of the hematocele through the vagina justifiable? Some writers say that this is the correct procedure. My experience with it is limited to one case which was lost from sepsis. It does not appeal to me as being ideal surgery because it leaves a mass to come away by disintegration. It certainly is better to clean it all up by laparotomy as was done in this instance.

It must not be forgotten that it is only when the rupture occurs in the broad ligament that well defined tumor results as a result of the ensuing hemorrhage. At other times the blood escapes into the abdominal cavity and is difficult to recognize by vaginal examination. If the hemorrhage be severe it will produce its effects upon the pulse and color the same as if it were escaping externally and the belly must be boldly opened to secure the bleeding area, even if there be no evidence obtained by vaginal examination.

Extra uterine pregnancy, like persistent accipito posterior positions, has been much more frequent in my practice than I have any right to expect from text book figures, and I have no doubt but that if all cases were promptly recognized and recorded the figures would show it to be a rather common occurrence.

There is no other origin for pelvic hematocele than rupture of an ectopic gestation save perhaps a severe trauma to that region. This the older text books failed to recognize.

In some cases after conception has occurred in the tube and the product failed to complete its journey to the uterus, but instead has remained arrested near the fimbriated extremity, the tube,

instead of rupturing, expels the sac through its outer end. This is accompanied by pain, shock and hemorrhage and is the origin of intraperitoneal pelvic hematocele. In a number of these cases there has been no need for surgical intervention, the hemorrhage ceasing soon and being absorbed without abscess formation.

In the case here reported several interesting questions arise. It will be remembered that pus was found in the tube at the operation. Now, is it possible for a pregnancy to occur in a tube which contains pus? One readily answers in the negative and concludes that the pus must have formed subsequent to the conception. No foetus was found, which is not to be wondered at, as the contents of the hematocele escaped also and it could very easily have been lost at so early a stage. The specimen unfortunately was not preserved.

SOCIETY PROCEEDINGS

Fort Wayne Medical Society.

Meeting of April 25, 1905.

Society called to order by Secretary Wallace at Hope hospital, with 28 members present. On motion duly seconded and carried Doctor Buchman was called upon to preside. Minutes of previous meeting read and approved as read.

CLINICAL CASES:—Case 1. *Obstruction of the Bowels from Meckle's Diverticulum.* Dr. J. S. Boyers reported this case as follows:

‘The patient from whom this specimen was taken was a female child 7 months old and the youngest in a family of four (4) children. Its maternal and paternal heredity is good.

“During the first one or two months of its life it was nourished from its mother's breasts. After that for two or three months it became much emaciated and had severe gastro-intestinal indigestion from being fed on cow's milk. During the remainder of its life it was fed upon and thrived well on condensed milk, and became normal in size and flesh and was contented and playful up to ten days before its death, when, without any warning or indisposition, it had 6 or 7 profuse hemorrhages from the bowels in 8 or 9 hours, and then the hemorrhage stopped entirely. The child suffered no pain at the time and for 6 days after the hemorrhage from the bowel it seemed

to be well, except it looked a little pale and weak. It had slept well through the night of the 6th day after the hemorrhage, but about 5 o'clock in the morning the mother noticed it was in great distress and that its abdomen was much distended and hard. I was called to see it and found it with typical symptoms of acute obstruction of the bowel. I gave it an enema of soap-suds through a tube passed up nine inches in the colon but no flatus or stool escaped. I spoke to the parents about an operation but it was refused; besides I could not give a positive diagnosis as to the source of the hemorrhage or the location of the obstruction. Its temperature was 99.5 F in the morning and 100.5 F. in the evening. The pain was controlled by giving 8 to 12 drops of Paregoric every 2 to 6 hours as indicated; besides $\frac{1}{2}$ gr. of salol and $\frac{1}{2}$ to 1 tablespoonful of olive oil every 3 to 6 hours. Up to the evening of the 8th day its condition was much the same as it had been on the 6th day, but not suffering so much. During this time had vomited bile 3 or 4 times but on the evening of the eighth day it passed a rather large soft stool and considerable flatus and was better and rested all night. At 6 A. M. on the 9th day it passed another large stool and more flatus, but one hour later, or 7 A. M., the bowel at once became plugged up and all the symptoms of obstruction returned, with vomiting of stool, and it continued to grow worse and died about 9 A. M. on the 10th day—just before I arrived to visit it. I asked for a post mortem and it was granted on the condition that I was to hold it alone and no one else be present. I had told the parents that probably the hemorrhage from the bowel was from a tubercular infection or from the obstruction being produced from intussusception or volvulus, or something of the kind, but that I was not certain.

“Post-mortem held April 12th, 1905: Abdomen much distended and hard rigor-mortis beginning. An incision was made from the ensiform cartilage to the middle of the pubic bone and down to the intestines which were firmly adhered to the abdominal walls and to themselves. A constriction of the ileum 17 in. above the ileo-cecal junction was found. The narrowing of the bowel was produced by a cord-like diverticulum (Meckel's) attached to the outer and free margin of the ileum at one end and the other end to the middle of the mesentery—and in such a way that the intestine was folded over on itself and several hard masses of stool had obstructed the lumen of the bowel above. A perforation near the attachment of the diverticulum to the ileum had been produced and considerable of the contents of the bowel passed into the abdominal cavity. In

this region especially the intestine and mesenteric glands were much congested. I am satisfied the hemorrhage and the obstruction was produced by a plug of hard stool becoming fixed in the narrow part of the gut, causing perforation and general peritonitis." (Presented specimen.)

DISCUSSION:—Dr. Porter in discussing Dr. Boyer's case said: "I am much interested in this case because I have had four cases of Meckel's diverticulum during the past 6 or 8 months. Three only were the cause of the abdominal trouble. The fourth occurred in gunshot wound of the intestine. Two very important points in this case are the hemorrhage and the obstruction. Most cases die of obstruction. The hemorrhage was due to the strangulation found. It ought to be a rule that cathartics are withheld in all cases where there are symptoms of mechanical obstruction of bowels. They do no good, but do do harm. It should be regarded as the safest and best to diagnose the condition through an opening in the abdomen. Celiotomy should be regarded as the legitimate means of diagnosis in these serious and obscure abdominal troubles."

Case 2. *Lepto-Meningitis*. This case was reported by Dr. K. K. Wheelock. The patient, a boy ten years of age, came home from school on March 12th complaining of severe headache of a peculiar penetrating character for which the family physician was called and a prescription given. On the afternoon of the following day the physician was again called, as the boy had not been relieved but had suffered from extreme pain and gradually passed into a comatose condition from which he occasionally aroused by crying out and complaining that he was suffering severely. Doctor Wheelock was called the following day and found the patient lying on his right side in a comatose condition. A history of recurrent attacks of suppuration from both ears was secured, but it was learned that the left ear had not discharged for a long time, and the right had not discharged for one month. The odor from the right ear had been pronounced during the time of the discharge. An examination of the drum membrane of the right ear showed it to be very opaque and much changed by old inflammatory processes. A small quantity of pus was found in the bottom of the canal. The left ear was found to be free from any evidence of disease of any sort. There was no swelling or redness over the mastoid, nor any evidence of inflammation in this region except the evidence offered by slight congestion of the posterior wall of the external auditory canal about the drum head. The right arm was paralyzed. The pupils would dilate when the

patient was awake and cry out, but contracted when he sank into a stupor. Examination with the ophthalmoscope was very unsatisfactory, but showed that the vessels were full and tortuous, and the optic discs, especially the right, blurred. A diagnosis of involvement of the brain from extension of the middle ear disease was made, and an operation advised and accepted. A radical mastoid operation was performed on the right side, with extension of the field of operation to the cranial cavity through the region of the attic. Bubbles of gas were found in the cells of the mastoid, but no pus. Upon exposure of the dura mater and its slight depression, a frothy serum escaped, indicating the probable presence of gas in the cranial cavity. An incision was made through the dura mater, through which the temporo-sphenoidal lobe was exposed for a distance of two inches. No pus was found. A small catgut strand was put through between the dura mater and the opening through the bone. The wound was then dressed with provision for drainage. The pulse had been slow but improved after the operation, as did all the general symptoms. Five days after the operation the patient was able to be up and about the room, but seemed to be very restless through his express desire to go home. On account of this restlessness it was decided to allow the patient to go home, where he became quiet. A few hours later he again became restless and complained of severe pain in the back of his head. He spent a very bad night. All evidence of paralysis in the leg and arm passed away and he used both freely, but the pain increased in severity for 72 hours after his return home, when he died in a comatosed condition. Throughout his illness his temperature had been about normal, except on two or three occasions when it went up to 103. The pulse was always slow. No lumbar puncture was made and no bacteriological examination of the serum from the wound was made. Postmortem was not allowed, but it was thought that the patient died from lepto-meningitis.

PAPERS:—*Talk and Demonstration of the Manner of Preparation of Various Articles Intended for Nourishment of the Sick*, by Miss C. Wooster, teacher in the cooking school. Miss Wooster said that foods properly cooked are already partially digested. Egg and milk are perfect foods. They contain five food principals, namely: Proteid, carbohydrates, fats, mineral substance and water. Cow's milk contains more caseine and therefore produces larger curds. Human milk produces smaller curds. Cow's milk requires modification before it can be fed to infants and very young children. For a baby

two or three weeks old twenty ounces is sufficient for twenty-four hours, with two ounces for a feeding. For a baby of this age the following formula is appropriate: Milk, 8 ounces; water, 11 ounces; milk sugar, 1 ounce; lime water, 1 ounce. It is not always necessary to sterilize the milk if the source of the milk is known to be above suspicion, and the water and bottles are properly sterilized. Gravity cream is preferable to centrifical cream as it digests more readily. To obtain cream by gravity allow it to stand for six or eight hours.

In feeding the sick consider first the sense of sight, as an invalid seldom has an appetite and must be tempted to eat. The tray, the dishes, and the linen should be perfectly clean, and the food should be free from a mussy effect. The food should be served in small quantities so that there will be just enough and not too much. In this connection a tray for the invalid was prepared with the following foods to be served an invalid: Beef tea, scraped beef, baked potatoes, egg in a nest of steamed rice, twice baked bread, cocoa and tea. The manner of preparing these foods was demonstrated before the audience, and the manner of doing so freely discussed.

The speaker said that the trouble with most beef tea is that the water is too hot and coagulation occurs before the juice is extracted from the beef. It should be prepared with warm water and never boiled.

Potatoes are a very popular food but they contain very little nutriment except for the starch. The best way to cook potatoes is to bake them, as it saves the starch and mineral matter. They should be baked in a slow oven. The digestibility of potatoes is increased by mashing, as it gets rid of the large pieces. Upon taking the potatoes from the oven the skin should be pierced, allowing the steam to escape, otherwise the potato becomes soggy on standing.

Eggs are very nutritious and easily digested when properly prepared. When the invalid tires of poached or soft-boiled eggs a nice way to prepare them is as follows: Separate the yolk from the white and beat the white of the egg until it is stiff and dry. Then drop the yolk in the center and bake in an oven until brown. Eggs should always be cooked over a slow fire, and soft cooked eggs are very easily digested. To boil eggs the water should be boiling when the egg is dropped in, and then allowed to stand six or eight minutes without further boiling. Another way is to place the eggs in cold water and allow the water to gradually come to a boiling point. This makes the white of the egg soft and jelly-like. If eggs are to be hard boiled it is better to boil them for twenty minutes rather

than ten minutes because the yolk is powdery and easy for the digestive juices to act upon.

Rice is greatly used for food, particularly to serve invalids. It contains 79 per cent. of starch, some proteid, and a very small percentage of fat. It should not be cooked in boiling water as it loses the starch and proteid. The rice should be placed in boiling water and allowed to steam for 45 to 60 minutes. Rice is four times as nutritious as potatoes, as the starch contained in it is in a very easily digested form.

Cocoa is a nourishing beverage and should be boiled three minutes on account of the starch, and then stand seven minutes over a slow fire before serving.

Tea should be made by pouring boiling hot water over the leaves and allowing it to stand so as to extract the qualities of the leaves.

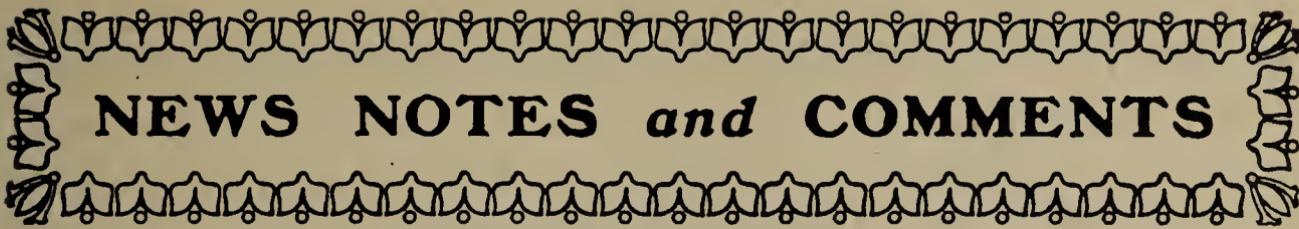
Fruit beverages are refreshing, stimulating and cool. Lemonade should be prepared by straining the juice of the lemon, mixing a sufficient amount of pulverized sugar to sweeten, and adding strawberries, cherries or other fruits to give a pleasing appearance. If desired the strained juice of the pineapple, orange, cherry, or other fruits may also be added.

Twice baked bread is recommended for invalids for the reason that being hard it requires more mastication in order to moisten it for swallowing, and this mastication, with a thorough mixing of saliva, aids the digestion. Furthermore, the second baking of the bread converts the starch into dextrin, which is easily digested. To prepare twice baked bread it is only necessary to secure the ordinary home made bread and then bake it a second time for three hours.

Dr. Bulson reported that Dr. C. R. Holmes, of Cincinnati, had accepted an invitation to address the Society on the following Friday night, and moved that the regular meeting for Tuesday night be postponed until Friday. Motion was duly carried. He also reported that in order to operate the stereopticon in connection with Doctor Holmes' lecture it would be necessary to procure a new rheostat, but that in view of the fact that the Society would need a stereopticon he deemed it advisable that the Society purchase a rheostat for its own use. A motion was then made and carried to purchase a new rheostat, and delegated Doctor McEvoy to select an appropriate apparatus.

Adjourned.

J. C. WALLACE, Sec'y.



NEWS NOTES *and* COMMENTS

Richmond Hospital.

The new Reid Memorial hospital at Richmond, Indiana, recently dedicated, is a beautiful building, well adapted to fill the needs of a modern hospital, and is most fortunately situated in commodious and picturesque grounds. The people of Richmond and vicinity are to be congratulated on possessing one of the finest institutions of its kind in the State. The writer has never seen as beautiful hospital grounds as are those at Richmond.

A Good Law.

A bill introduced by Mr. Burnett has passed the legislature of Illinois prohibiting attorneys from soliciting personal or other damage cases. This measure was endorsed by the State Bar Association, and is directed against shyster lawyers, who make a business of drumming up this character of practice against members of the medical profession.

Medical Course in Public Schools.

A new department of preventive medicine is to be added to the course of the public schools of Bluffton, Indiana. Dr. V. S. Cheney, city health officer, will deliver lectures dealing with bacteria and all germ life, the lectures to be illustrated with stereopticon. The course is designed to teach pupils how to keep their health and avoid disease, and for the purpose of assisting to keep the city in a sanitary condition.

Dr. John S. Bobbs, the Father of Cholecystotomy.

The original paper of Dr. John S. Bobbs on "Lithotomy of the Gall Bladder" appears in the July number of the *Indiana Medical Journal* in connection with an ably written historical article on that subject by Dr. A. W. Brayton. The operation was performed in Indianapolis on June 15, 1867, and it was the first cholecystotomy ever performed. The operation was described in a paper read before the Indiana State Medical Society the following year, and the report may be read in the transactions of the Society for 1868 under the

title of "Lithotomy of the Gall Bladder." The patient, who is still alive and in the 68th year of her life, was the guest of the Indianapolis medical profession at the Portland meeting of the A. M. A., where she was presented before the section on Diseases of Women, by its chairman, Dr. L. H. Dunning, of Indianapolis, as the first patient upon whom cholecystotomy had ever been performed, the credit for which was due Dr. Bobbs, an Indiana surgeon. A reprint of Dr. Brayton's paper, with the original report of Dr. Bobbs, a memorial address by Dr. P. H. Jameson, and numerous illustrations was freely distributed at the Portland meeting. It bore the following inscription: "This reprint is dedicated to the American Medical Association, in session at Portland, Oregon, July 11-17, 1905, in memory of Dr. John S. Bobbs, of Indianapolis, the founder of the surgery of the gall bladder, by the Medical College of Indiana, the *Indiana Medical Journal*, and the Indianapolis and State Medical Societies, which Dr. Bobbs assisted in organizing, and on behalf of the thousands of patients whose lives have been made happy and prolonged by this beneficial operation.

Personals.

Dr. Charles Bock, now practicing in Los Angeles, is visiting his family and friends in Allen and adjoining counties. Doctor Bock is a graduate of the Fort Wayne College and was for two years resident physician of the Indiana School for Feeble Minded Youth. His many friends will be pleased to know that Dr. Bock is enjoying good health, and is doing a nice practice in his new home.

The American Association of Obstetricians and Gynecologists meets in New York Sept. 19, 20 and 21.

Dr. Clifford Wallace has returned from a vacation spent at Atlantic City.

Dr. A. E. Bulson and family are taking an outing at Clear Lake.

Dr. H. A. Duemling is taking an auto trip to Wisconsin.

Dr. C. E. Barnett is contemplating a trip to Europe.

MEDICAL REVIEWS

Department of Medicine and Therapeutics

In Charge of **George W. McCaskey, A. M., M. D.**
Professor of Clinical Medicine in the Fort Wayne College of Medicine, Ft. Wayne, Ind.

Treatment of Hyperacidity.

Albu, (*Therapie der Gegenwart* Berlin, J. A. M. A.) divides hyperchlorhydria into four forms as follows: 1, A purely nervous disturbance of secretion; 2, that accompanying chlorosis; 3, an early stage of peptic ulcer; 4, the expression of a chronic hyperplastic gastritis. He advises the use of vegetable foods in preference to meat because they stimulate the secretion of HCl to a less extent. The importance of having the food well cooked and finely divided is emphasized and for this purpose he recommends rubbing the food through a sieve. Stomach lavage is recommended in stubborn cases using an alkali fluid for the irrigation. A combination of an alkali and belladonna is recommended to restrain secretion of the acid, and the constipation which usually accompanies this condition is treated by an oil enemata and an occasional cathartic.

Migraine and Cannabis Indica.

Carriere in *Presse Medicale*, alleges that in migraine the treatment should be directed to, first, the neuroarthritic condition; second, the organic or functional trouble present in every case; and third, the causes which provoke the attacks. The author meets the first indication by an appropriate alimentary regimen, together with the systematic use of cannabis indica and hot douches. Cannabis indica he considers very valuable for the relief of headache. He meets the second by correcting any fault which may exist in the general economy. The provocative causes vary with each individual subject. Among them may be enumerated alimentary troubles, errors of diet, constipation, etc., intoxication, tobacco poisoning, uterine congestion due to menstruation or other causes. The effect of thermal springs is praised, Vichy in particular being spoken of very highly.—*N. Y. Med. Jour.*, and *Phila. Med. Jour.*

DEPARTMENT OF SURGERY GYNAECOLOGY *and* OBSTETRICS

In Charge of Miles F. Porter, A. M., M. D.
Professor of Surgery and Gynaecology in the Fort Wayne College of Medicine,

Myomectomy.

H. M. Hepperlen, in the course of a paper on the treatment of myofibromata of the uterus (*Western Med. Review*, Aug. 1905), uses the following language which we think will bear repeating inasmuch as it supports a position in the treatment of these cases which should be more generally accepted.

"My first plea for myomata of the uterus is to avoid hysterectomy where myomectomy can be performed. I fully agree with Kelly, who says 'Myomectomy is especially adapted to the treatment of single or of isolated tumors, and should always be preferred to hysteromyomectomy, in a young woman; and if hysteromyomectomy is performed, definite reasons must be given why the radical instead of the conservative plan of treatment is selected.' In one patient I removed six myomata, ranging in size from a walnut to a large hen's egg, through five incisions. The patient completely recovered, and has since given birth to a healthy child. In another case I removed a large myoma the size of a fist from a pregnant uterus which was attached to the bladder, and the patient made a perfect recovery. I submit, therefore, that myomectomy is preferable to hysterectomy in all cases where it can be performed."

Abdominal Crises Caused by Meckel's Diverticulum.

Miles F. Porter, Fort Wayne, Ind., reported having seen four cases inside of a few months, inducing him to write this paper, which included reports of 184 cases, of which 35 were not hitherto reported. He took up the causes of the condition together with the diagnosis and treatment, and expressed his belief that delay in operating was the chief cause of the great mortality. Meckel's diverticulum is present in from one to two per cent. of all individuals. It is the cause of intestinal obstruction in six per cent. of all cases. When present it is a greater menace to life than the appendix. Illustrations were displayed showing some of the numerous ways in which diverticula cause trouble. Diverticu-

litis is likely to be diagnosticated as appendicitis. Trauma is probably a frequent cause of crisis, due to Meckel's diverticulum. Symptoms are not distinctive and a correct diagnosis is hardly possible, nor is it necessary. A working diagnosis can be, and should be, made early. Mortality in these cases is extremely high, and is due largely to delay in operation. A Meckel's diverticulum, when encountered, should be removed, whether it is causing trouble or not. It should be excised rather than inverted, using a purse-string or Lembert suture to close the opening, owing to its size and relation to the gut. —(Am. Med., Aug. 26, 1905; Section Surgery, A. M. A., Portland, July, 1905).

Tumors of the Spinal Cord.

J. Collins Warren reports three cases (*Am. Medicine*, Aug. 26, 1905), of recovery following operation for tumors of the cord. In two cases extramedullary tumors were found and easily removed. In these cases the recovery is practically complete, one was operated seven years ago and one on Dec. 6, 1904.

In the other case the trouble was intramedullary and could not be removed, laminectomy being done for relief of pressure.

The first operation was done by Dr. W. W. Keen, 14 years ago, and a second one by Dr. Warren seven and one-half years ago. These operations greatly relieved the patient and he is now doing his work as an architect, and has been so doing for two years.

Anastomosis of Blood Vessels.

Carred (*Am. Med.* Aug. 12, 1905), resected portions of the caroted and femoral arteries and restored the continuity of the arteries by interposing portions of the jugular and femoral veins. The circulation below the anastomosis was immediately re-established and the interposed vein adequately supported the arterial pressure. Perhaps in this procedure there lies hope for saving limbs and lives hitherto doomed.

Appendicostomy in Chronic Colitis.

Dr. Willy Meyer (*Med. News*, Aug. 20, 1905), writes of the treatment of chronic colitis and sigmoiditis by irrigation through an opening established by either cecostomy or appendicostomy and reports five cases which support his warm advocacy of this method in properly selected cases. He prefers appendicostomy to cecos-

tomy where the caliber of the appendix is ample. He warns against the too early closure of the opening for fear of a recrudescence of the colitis. The lumen of the ordinary appendix is quite sufficient to permit adequate irrigation. Meyer introduced two quarts of fluid through a No. 14 F. catheter and made it pass the entire large bowel in 10 minutes. Fecal leakage is easily controlled. The operation is simple and safe.

Iodine in Surgery.

In a paper read at the meeting of the Northern Tri-State Med. Soc. in Ft. Wayne June 15, 1905, and published in the first number of *Surgery, Gynecology and Obstetrics*, Senn speaks highly of iodine as an antiseptic and recalls the attention of the profession to an "old lore" which has been in a measure forgotten for others not more worthy and yet others less worthy. Iodine was successfully used to prevent and combat sepsis before the cause of infection was known. This, by the way, is only one of many instances in which the usefulness of a remedy was well established empirically long before a scientific explanation could be given of its mode of action. As an application to the skin in erysipelas it is decidedly useful, and its use by parenchymatous injection in anthrax seems well established. As a stimulant to the tissues it has no superior and as an antiseptic it belongs to the first rank. A solution of one-fifth of one per cent (aqueous) kills the streptococcus pyogenes in two minutes, and a one-half of one per cent. solution kills the staphylococcus pyogenes in five minutes. Iodine is irritating and therefore its use painful, but it is non-poisonous. In the treatment of hyperplastic goitre, actinomycosis and blastomycoses the local use of iodine by cataphoresis is effective.

The Diagnosis of Gall Stone Disease.

W. J. and C. H. Mayo, *Clinical Review*, May, 1905. In 1,100 operations for gall-stone disease there was a mortality of 5 per cent. In 897 of these cases, where the disease was benign and confined to the gall-bladder, the mortality was three per cent. In 456 cases of simple gall-stone disease the mortality was less than .55 per cent., while in 43 malignant cases it was 21 per cent. The difference in these cases is an effective commentary on the danger added by obstruction, infection, and malignancy. Hence the responsibility of the physician in diagnosing early and advising surgical treatment.

Gall-stones are probably the result of cholecystitis, which in turn is caused by bacterial infection descending from the liver. An artificial division of symptoms into five stages facilitates description. First, simple gall-stone colic, epigastric and radiating pain, lasting from minutes to hours, without elevation of pulse or temperature, and on cessation leaving the patient well. Second, with obstruction at pelvis of gall-bladder, there is the same colic, but it leaves more or less tumor and tenderness, with slight increase of pulse and temperature. Third, with contraction of gall-bladder there ensues absorption of its contents and local plastic peritonitis, which often impairs common-duct drainage and produces an evanescent jaundice. This stage induces the chronic gastric phenomena so often wrongly diagnosed. Fourth, stone in the cystic duct, causing sudden attacks of fever with pain that is usually of considerable duration, and occasional temporary jaundice. Fifth, the stone passes into the common duct, and there is irregular fever, chills, pronounced jaundice, with remissions and exacerbations.

With increased chronicity, changes develop in the gall-tract walls and the pancreas, with loss of weight and anemia. As regards jaundice, it "has no part in the diagnosis of gall-bladder stone, and when present means a complication," either cholangitis, or obstruction of common duct by infection, adhesions, stone, or neoplasm. In conclusion, "it is a false conservatism which stands in the way of early operative interference in gall-stone disease."—C. S. Oakman, *Detroit Med. Jour.*, June.

Fractures.

David E. Wheeler concludes an article on fractures (*Buffalo Med. Jour.* Sept, 1903) as follows:

1. Fractures of the fibula alone may be fearlessly treated by massage and passive movements from their inception, and those so treated may be allowed to walk two weeks after the receipt of fracture without comprising the final result.

2. In Pott's fracture and fractures involving the tibia more caution should be used. The patients will often require a solid plaster-of-paris splint for the first ten days, which will, of course, preclude the use of massage during that time. They should not be allowed to walk for at least a week after bony union is apparently firm. This will make the total time of disability from 28 to 42 days. At no time during treatment should any deformity be tolerated and

our power to prevent deformity is a distinct limit to the applicability of this method of treatment.

3. The time required for true bony union cannot be much shortened.

4. The total time of disability is, however, materially shortened and the final result as to function is as good, if not better, than under strict, complete and prolonged immobilisation. This gain is obtained rather by preventing sequelæ than by hastening union.

5. The traditional ideas concerning the amount and duration of immobilisation necessary to secure good union in fractures of the leg need revision.

Immobilisation is a distinct detriment to the patient, and no more of it should be used than is found in each case to be required to give correct apposition of the broken bone ends. As soon as examination shows that apparatus can be discarded without causing recurrence of deformity, this should be done without waiting to comply with any rules for the duration of immobilisation. In most cases the slight disturbance caused by frequent inspections of a fracture is beneficial rather than injurious.

Incomplete Hernia a Cause of Obscure Abdominal Pain.

Stockton was perhaps the first to emphasize the fact that commencing hernia, especially inguinal, often caused serious abdominal pain when the usual signs of hernia were absent save a patulous caecal or ring, noticable only on careful examination, and to prove his opinion through surgical cure of his patients. In a recent article, Stewart, (*Am. Medicine*, July 29, 1905) says that quite often very small epigastric hernia which may be detected only by careful examination cause distressing symptoms which are usually referred to the stomach. Such herniae are too often overlooked or their importance underestimated when their existence is known. M. F. P.

DEPARTMENT OF MATERIA MEDICA, THERAPEUTICS AND PEDIATRICS

In Charge of Budd Van Sweringen, M. D.
Professor of Theory and Practice of Medicine and Clinical Medicine in the Fort
Wayne College of Medicine.

The Treatment of Pulmonary Hemorrhage by Adrenalin Chlorid.

D. Barty King, *International Clinics*, Vol. II., 1905, details experiments which go to show that adrenalin raises blood-pressure and augments the power of the heart.

He thinks there is no evidence to show that this agent hastens coagulation of the blood. For these reasons he argues that adrenalin should not be used in pulmonary hemorrhage and he shows by sphygmographic tracings that arterial pressure is raised clinically and that no beneficial effect is manifest on such cases.

The Therapeutic Indications of Kephir.

G. Hayem, *International Clinics*, Vol. II., 1905, contributes a clinical lecture on the above topic:

Kephir is cow's milk that has undergone a special mode of fermentation. For this purpose a mushroom, called Kephir-seed is used, which contains a bacterium, *dispora caucasia*, and a yeast, *Saccharomyces cerevisiae*. Under this influence the lactose produces lactic and carbonic acids and alcohol, and the albuminoid substances, casein in particular, undergoes partial precipitation and digestion producing peptones and propeptones.

It is rich in CO₂. Its taste is somewhat sour. It may be fermented at a low temperature, 15 to 20 C, for 24, 48 or 72 hours.

As a food, he says, it does not possess any advantage over cows' milk, but as a "food-remedy" he thinks it has a field of usefulness.

It is applicable to gastric disorders characterized by hypopepsia or apepsia, with slight secretion and rapid evacuation. In these cases it stimulates secretion while supplying nutriment.

When the hypopepsia is associated with weakness of the musculature, myosthema, Kephir is indicated. In gastric carcinoma without abstraction it gives excellent results in improving the nutrition.

In hyperpepsia with abundant secretion it is contraindicated, also in gastric ulcer. It should not be used in pyloric obstruction.

When indicated it is given three or four times a day, a tumblerful at a dose. It is combined with other suitable foods usually.

It should be remembered that when fermented but 24 hours it is slightly laxative, but when fermentation has proceeded 72 hours it becomes constipating.

According to A. E. McFarlane, *McClure's Magazine*, Metchnikoff considers age a disease brought about by an inhibiting action on the phagocytes by the intestinal flora. He proposes to postpone senility by addressing remedies against these flora, and taking his cue from the great age attained by the Bulgarian mountaineers, who use large amounts of sour milk. He recommends and has himself adopted the practice of drinking milk fermented by Kephir, or "Kefir," on the theory that this germ of sour milk will destroy or hold in check other more harmful germs whose action on the phagocytes renders them less able to resist bacterial invasions.

DEPARTMENT OF OPHTHALMOLOGY OTOLOGY, LARYNGOLOGY & RHINOLOGY

In Charge of Albert E. Bulson, Jr., B. S., M. D.

Oculist and Aurist for St. Vincent's Orphan Asylum, the Allen County Orphan Asylum and the U. S. Pension Bureau for Northern Indiana and Northern Ohio; Professor of Ophthalmology in the Fort Wayne College of Medicine, Fort Wayne, Indiana.

Treatment of Chronic Nasal Catarrhs with Sulphur.

Dr. L. Kolipinski, in the *Medical News*, August 12th, advocates the use of sulphur in the treatment of several forms of chronic nasal catarrh. It is his custom to have his patient seated with the head erect and the mouth open. The anterior nasal cavity is exposed with a speculum, the tip of the nose elevated, and the sulphur freely blown in with a powder blower. This has been properly done when the powder appears from mouth and opposite nostril and an irritating cough results. The treatment is repeated on the other side. The posterior nasal space and naso-pharynx may also be treated directly by way of the nose or fauces. These procedures are not entrusted to the patient unless he is unusually attentive to his own case. They are made two or three times a week for a month, and once a week for the next two months. The local sensations of sulphur are not unpleasant. Occasionally in women it sets up a conjunctival hyperemia when used too profusely or when accidentally blown on the face, and some women complain of nasal irritation and

pain; then it is best to use the treatment but once a week. The cases must be selected carefully, those in which there are no other primary nasal disease, deflection, deformity of growth must be treated surgically. This method of treatment has proved of value in simple, chronic, hypertrophic, atrophic and phlegmonous rhinitis; and in simple chronic and hyperplastic naso-pharyngitis.

Two Cases of Functional Strabismus.

D. B. St. John Roosa's first case is that of a girl, aged eleven, who, after an attack of what was called, erroneously the author thinks, cerebral meningitis, recovered from the other symptoms but continued to have functional strabismus. Treatment of the squint by glasses proved ineffectual and the interna were therefore stretched and divided under ether according to the method of Panas. For a time there was intermittent strabismus with double vision after the operation, which did not yield to treatment, but finally, two and a half years later, after all treatment except the use of the stereoscope and correcting glasses had been dropped, the intermittent strabismus ceased, and has not returned. The other patient was a boy four and a half years old, who had functional, convergent strabismus and amblyopia ex anopsia, which was cured by the use of glasses and exercises which involved exclusion of the good eye at intervals, and the use of the stereoscope. Now, at the end of eight years, the strabismus has disappeared, though correcting glasses are still worn. The author lays much stress on the thoroughness of the drilling in this case, through which the cure was effected.—*Medical Record*, September 2, 1905.



BOOK REVIEWS

Operative Surgery, by Joseph D. Bryant, M. D. Fourth edition. New York and London, D. Appleton & Co., 1905.

All surgeons and most general practitioners are well acquainted with this work and in reviewing this edition it is necessary to say little more than enough to call attention to the changes which have been made in order to bring the work up to date. As indicating the thoroughness of the revision to which the work has been subjected we note the reference to Crichton's recent and excellent work on shock; the description of Matas' method of the radical cure of aneurisms; of Cushing's method of repair of the facial at the expense of the spinal accessory nerve; the description of Connell's suture, Coffey's crushable potato boffin, the McGraw ligature and numerous other advances along the line of gastro-intestinal surgery. The advances in gastric surgery by Mayo, Monyhon, Finney and others receive adequate attention. A perusal of the pages devoted to the operative cure of hernia shows that the recent advances along this line also are given due attention. In short, the work has been thoroughly revised, largely rewritten and considerably enlarged. Were I to criticise the work at all I should say that it contains too much. The expediency of describing operations that are well nigh, and deserve to be entirely obsolete, is open to question. By the omission of such matter the work could be considerably reduced in size, however, the two volumes as they are are not at all unwieldy, and in all fairness it may be said to be second to no other work of its kind. Each volume has a separate index. The work would be a handier one if on the back of the cover of each volume were printed the topics covered in each.

M. F. P.

International Clinics, Vol. II, 1905. J. B. Lippincott, Publishers, Philadelphia.

This work, under the editorial management of A. O. J. Kelly, is now so favorably known that comment seems unnecessary.

This volume contains the usual number of good things by qualified writers and teachers. We would draw special attention to the articles on tuberculosis as being peculiarly valuable to the general practitioner.

B. VANS.

Fort Wayne Medical Journal-Magazine

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EDITORIALS

The Closing of the Fort Wayne College of Medicine.

After twenty-seven years of existence, throughout which time continuous instruction has been given medical students, the Fort Wayne College of Medicine, as an independent institution, has gone out of existence through its union with the other medical colleges of the State of Indiana to form the medical department of Purdue University.

It has long been recognized by prominent and progressive medical men that in the matter of medical education there must, in order to keep up with the progressiveness of the age, be a concentration of forces and a combination of the recognized medical ability of this country; and the union of all the medical colleges of Indiana to form

the medical department of Purdue University is a step in this scheme of higher medical education.

That in the past the Fort Wayne Medical College has filled a well earned place among those medical colleges which have created and maintained a higher medical standard is unquestioned, and the reputation which the school bore for progressiveness and thoroughness of work is attested by the character of students yearly graduated from its doors. The faculty and trustees of the College have always insisted upon raising rather than lowering the standard of medical education, and to that end the Fort Wayne College of Medicine has been among the leaders in lengthening the courses of study, and imposing greater exactions upon students.

The closing of the school and the merging of its four classes with the classes from the two other medical colleges of Indiana, who now form the medical department of Purdue University, is a matter of regret to those who have been teachers in the Fort Wayne College of Medicine for so many years; and in accepting the invitation of Purdue to relinquish all right and title to a medical school in the city of Fort Wayne, in the interest of the establishment of one large, amply equipped and well managed medical institution, under the control of Purdue and the support of the State of Indiana, an example of unselfishness and self-sacrifice is exhibited on the part of those who have owned and controlled the Fort Wayne College from its foundation, and the action is all the more creditable because it is voluntary and carried out solely with a view to advance the educational interests of the State.

By the terms of agreement with Purdue the students of the Fort Wayne College of Medicine are given full credit for all work previously done, and are taken into the medical department of Purdue on the same basis as the students of the two other medical colleges who have joined in the consolidation. The alumni of the college become alumni of Purdue, and a small proportion of the faculty of the Fort Wayne College of Medicine will be represented on the faculty of the University.

The three medical colleges that have united to form the medical department of Purdue have all been reputable and prosperous institutions, with due credit to themselves and the State. Their faculties comprise some of the most prominent medical men in the State, not a few of whom have National reputations. Purdue University, while one of the largest and best institutions in the West, has not heretofore maintained a medical department, and therefore this new move

only broadens the scope of the institution and makes it second to none in ability to give a first-class scientific education in any branch. The medical profession of the State, in closing its medical colleges and giving the University as teachers its best men, is contributing no small part in all that makes for a successful institution. If the legislature now comes forward with financial support which such a venture warrants, the State of Indiana will have a medical school which will not only be a credit to Indiana, but the United States. Then will the medical men who have so unselfishly donated their interests by voluntarily closing the medical colleges of the State, feel that their sacrifice has not been in vain. A. E. B., JR.

A Correction.

In our August number we published an article on "The Treatment of Chronic Constipation in the Infant," and gave the name of the author as Dr. S. D. Beavers, of Decatur, Ind. The article should have been credited to Doctor Alfred Kane, Fort Wayne, who presented it at a regular meeting of the Fort Wayne Medical Society. The error occurred as a result of carelessness in placing the names of Doctors Beavers and Kane on two papers on allied subjects received at one and the same time without marks of identification. We offer our sincere apologies to our readers for the error.

Responsibilities of Surgery.

M. H. Richardson, Boston (*Journal A. M. A.*, October 7), in his chairman's address before the Section on Surgery and Anatomy at the Portland Session of the American Medical Association, dwells especially on the importance of the qualifications of the surgeon, both by education and practical training, diagnostic ability, operative judgment, technical skill and in after-management of the case. He thinks that too many physicians who lack both training and surgical judgment, try to be surgeons, and that even in small places surgical practice should be confined to one or two competent men who, in turn, should give up their medical cases to their non-surgical brethren. He gives illustrations in support of his views, and thinks that suits for damages, unjust as most of them are, may in the end, work out the proper solution of the problem. It is these that bring out the responsibilities of surgery more than anything else. The responsibilities for advising operation, for performing it and for after care are greater than skilled surgeons often realize, an example, the interval operation for appendicitis, which is commonly called a per-

fectly safe operation. He asks what should be the education of the surgeon, and besides the mental qualities of hopefulness and endurance, he mentions manual skill, which alone, however, is of little value without the finer mental qualities that permit of accurate decisions from intelligent observation. The surgeon should be a mechanic and should have a thorough knowledge of practical anatomy and of pathology, but the chief preparation must be in the direct contact with patients, and the best preparation that a man can have for becoming a practical surgeon, he thinks, is being an assistant in a hospital. Four, five or six years of this, he thinks, is little enough.

Worthy of Attention.

In Mayor McClellan's address to the convention of the National Educational Association at Asbury Park on Tuesday, July 4th, are found two paragraphs worthy of attention. How wholesome, for example, is this sentiment from the Mayor's address:

"The country needs men of thought and men of learning, and needs them badly. The man who thinks may be a greater patriot than the man who does. It has been said that no amount of sweetness and light will avail unless accompanied by action, which is the same as saying that the brain would be useless without the power of expression. We have deified action at the expense of thought. The good old motto, 'Act in haste, repent at leisure,' no longer stands at the top of our copybooks. We have so persistently preached the doctrine of action that we are almost convinced that any action is better than none. Not only have sweetness and light been discarded as effeminate fads, but thought and deliberation bid fair to follow them. 'If you can't act well, then act badly; but, for Heaven's sake, act,' threatens to become our guiding rule. When Samson pulled down the pillars of the temple he certainly performed a most vigorous action and yet it may well be questioned whether a little more sweetness and light and a little less vigor might not have been as instructive and beneficial. Vigorous action is very admirable at times, but 'look before you leap' is a safe rule of life."

Then, too, how salutary is the lesson conveyed in these few lines of the Mayor's address:

"We suffer from the spirit of unrest which frequently prompts us to ill-considered, immatured and thoughtless action, often merely for the sake of doing something. We are inclined to applaud the man who does, not so much because he accomplishes anything useful as because he accomplishes something, be it good, bad or indifferent.

"This spirit of unrest permeates our whole national life, political, social, educational. Contentment bids fair to be banished from our existence. He who is contented is sneered at as being without ambition, and yet ambition and hysterics are very different things. Contentment and happiness are synonymous, but we prefer to sacrifice both in a struggle for the unobtainable. Were our ambitions laudable our state of mind would be most commendable, but unfortunately we scarcely know what we are striving for. We have forgotten that deeds are merely a means to an end. Having no particular end in view, we treat the deeds themselves as the *summum bonum*, the ultimate object of attainment."

There is balmy truth enveloping these utterances of the Mayor's which should be taken home to every American heart. There are times when we should masticate crosscut saws, battle-axes and adzes, and assert that we are fond of the fodder, but for a steady diet aren't they rather trying?—*N. Y. State Med. Jour.*, Aug., 1905.

ORIGINAL ARTICLES

No paper published or to be published elsewhere as original
will be accepted in this department.

*Early Diagnosis of Pulmonary Tuberculosis.**

BY

BEN PERLEY WEAVER, B. S., M. D.
Fort Wayne, Indiana.

So much has of late been written upon this subject that there is little hope of presenting anything new to you in this paper, hence an effort has been made to collect some of the more recent data and opinions of those whose clinical experience has led them into a minute study of the disease.

In the beginning, let us determine what is to be our standard of comparison regarding the term "early," for we must concede it to be a relative term, since there is ample evidence that the complete evolution of the single tubercle requires from two to four weeks, with no symptomatology until the disintegration of the isolated foci. Hence the process may not manifest itself clinically for months; Cornet, says (1) indeed, never less than half a year, occasionally a year or a year and a half, depending upon the virulence of the infection,

*Read before the Fort Wayne Medical Society, June 20, 1905.

save in multiple invasion as in the acute miliary form. So important has the definition of the word "early" become in its relation to the diagnosis of pulmonary tuberculosis that Clapp, (2) of the Massachusetts State Sanatorium for Incipient Tuberculosis, declares that the exact percentage of cures depends very largely upon its definition. Before Koch's discovery, physicians were often loath to call a case pulmonary tuberculosis until it was hopelessly advanced. Before this time the patient was thought to be "threatened" with consumption, to have "weak lungs," to be in a "pretuberculous" condition. With the advent of the microscope, the early case was pushed one stage further back, and the fact became recognized that a person could be really tuberculous with very slight symptoms. The microscope was then thought to give the very first intimation of the onset of the disease. But afterward when patients dying, some from other causes, who had shown no bacilli in their sputum, revealed millions of tubercle bacilli in their lungs, proof was given that the early stage must be pushed back still further. The germs were there but did not appear in the sputum because ulceration and cavitation had not progressed far enough or in the right direction, perhaps, to let them out. Regarding the relation between positive sputum examination and early diagnosis, a few opinions from the more prominent workers in this line are quoted. Thus Pottenger, of Los Angeles: "It would not be considered an early diagnosis of an abscess (in any part of the body) when it had broken down and the products of discharge had been found to contain the pyogenic cocci by microscopic examination; yet many are content to call it an early diagnosis in pulmonary tuberculosis when the tubercles have broken down and afforded us bacilli-bearing sputa." Again, Knopf, of New York.: "If we examine the matter carefully we must admit that in very early cases of pulmonary tuberculosis, the expulsion of bacilli with the expectoration which at that time is exceedingly scanty, can hardly be expected. There must be a disintegration of the tubercle before we can assume that the bronchial or pulmonary secretion will contain the specific organism of tuberculosis." It is the opinion of Woods Hutchinson that "the clinician who waits until he can clinch his diagnosis by the sputum test has lost the most valuable weeks or months in the whole history of the disease and nearly half his chances of effecting a cure." And the practical conclusion of Cheney is drawn from his remarks, thus: "We come back, therefore, in the diagnosis of early pulmonary tuberculosis to old and well-tried methods—the clinical history and the physical examination—as the ones

of most importance still. Of the newer methods sputum examination does not give information early enough; tuberculin may give a reaction when no active tuberculosis is present and may fail to give a reaction when active tuberculosis is really present; while the Röntgen ray confirms for us what physical examination has already discovered, but does not tell us anything that cannot be found out in other ways." And so we will assume that no case is to be considered an early one when the sputum findings are positive for the tubercle bacillus.

The importance of an early recognition of the disease cannot be too strongly emphasized, as has been comparatively recently brought out by Osler (3) in his lecture delivered under the auspices of the Henry Phipps Institute. He believes that it is not too much to say that could we get on the part of the doctors throughout the country an early recognition of the cases, with a practical conviction of the necessity of certain urgent and obvious measures, and on the part of the public, attention to hygienic laws of the most elementary sort—could we in this way get the truth we know into the stage of practical efficiency, the problem would be in sight of solution. Furthermore he believes that the germ is ubiquitous; that few reach maturity without infection by it, and none reach old age without a focus somewhere. The old German popular adage, "Jedermann hat am Ende ein bischen Tuberculose," has been well verified by the post-mortem records of Naegeli in Ribbert's clinic in Zurich where careful examination and sections were made of every organ of the body and tuberculous lesions were demonstrated in ninety-seven per cent. of all adult bodies. Likewise Franz's tuberculin experiments on healthy Austrian soldiers, over sixty per cent. of whom gave a reaction, force upon us the conclusion that latent tuberculosis is much more extensive than is the manifest disease. And surely no one will dispute the proposition as put forth by Osler that "in the warfare against tuberculosis, the man behind the gun is the general practitioner. The battle cannot be won unless he takes an active, aggressive, accurate part. That he is not always alert must be attributed in part to the carelessness which a routine life readily engenders and partly to a failure to grasp the situation in individual cases. The insidiousness of the onset, the protean modes of advance and the masked features of even serious cases must ever be borne in mind." Indeed, so important does Trudeau (4) regard the early diagnosis of pulmonary tuberculosis that he advises a special course in the curriculum of medical schools to be devoted exclusively to this subject and suggests

summer courses in sanatoria. Bridge (5) even goes so far as to say that "above all else an early recognition of tuberculosis is essential to the cure or proper management of the case," and believes that if the microscope reveals the presence of bacilli in the sputum, then the patient has been sick at least six months. Four years ago Trudeau (6) expressed himself on the point in question when he declared the curability of the disease to be in direct proportion to the time at which the disease is recognized and treatment instituted. Later (7) he observed that of the one thousand and sixty-six cases traced from two to seventeen years after their discharge from the Saranac Sanatorium, sixty-six per cent. of the incipient cases remain well at the present time; whereas only thirty-one per cent. of all cases discharged during the same time, remain well at present.

The diagnosis of any disease must needs rest almost solely upon the anamnesis, the symptomatology and physical findings, and since we have ruled out the microscope as a factor in the early diagnosis, we are all the more limited to these three diagnostic aids. Likewise, since the symptoms and physical signs in the very earliest cases are so meager, by exclusion anamnesis becomes the most important factor left for the really early diagnosis, with the possible exception of the tuberculin test. Thus Flick declares in the First Annual Report of the Henry Phipps Institute for the Study, Treatment and Prevention of Tuberculosis, that "as a matter of fact, the beginning of tuberculosis gives no symptoms. Tuberculosis exists from the time of implantation and the duration of the disease really should be counted from the time of exposure to the contagion." This matter of direct exposure to the contagion is of the utmost importance in taking the patient's history, and Wise (8) aptly expresses it when he says that "developments of late years have placed infection preeminently in the front rank as the cause of tuberculosis, and left heredity resting upon a very flimsy foundation, the term "hereditary predisposition" being admitted as a sort of mysticism and the condition a secondary factor." Likewise Walsh (9) would drop the term "pre-tubercular stage" as it is ordinarily applied because recent observations prove the rule that these patients are already suffering from true tuberculosis. The same author declares that he considers the most important point in early diagnosis to be the history of environment, i. e., whether there is any possibility of contagion from the persons with whom he or she is intimately associated. Upon the matter of anamnesis Cornet (10) believes that it should embrace not only the family but the more remote outside environ-

ments, especially since a specific hereditary predisposition can no longer be recognized, save that children of tuberculous parentage enter the world weakened and hence are rendered more susceptible to infection. A simple history of family tuberculosis is by no means sufficient, but the data should be complete and explicit as to the exact time of illness and of death, extent of association and exposure of the patient to previous consumptive, what disposition was made of the sputum, the associations outside of the family, as the school, factory, work-place, dwelling, etc. Occupation should be carefully considered. English statistics have shown laundresses to be more than twice as liable to consumption as working women of the same class in other occupations. Likewise scrub women in public halls or buildings are exposed to infection from the free expectoration common to such places. Men who work in factories, particularly in crowded tailor shops in tenement house districts are prone to tuberculosis. Hence the necessity of a close study of the individual patient rather than a search for any one pathognomic symptom or set of symptoms and findings for the disease. Of the two thousand thirty-nine cases treated at the Henry Phipps Institute last year, the occupations from which the highest number came for treatment was "housework" for females and "laborer" for males. More than half of all cases were preceded by either typhoid fever, pneumonia or pleurisy, and over two-thirds of the cases in which a history of exposure could be obtained, gave contagion from blood relatives as the source of the disease. The fact that only a little over seven per cent. had the disease limited to one lung shows how slow people with tuberculosis are to recognize that they are really ill and in need of medical attention. So insidious is the disease that it makes great progress often before its existence is even suspected by the victim, and occasionally by the physician himself. One persistently recurring feature as pointed out by King (11) of the Loomis Sanatorium is the striking difference of time between the first presumptive evidence of disease and the first demonstrable evidence, which is often a period of many years marked by apparently perfect health, the original outbreak either being forgotten by the patient or regarded by him as having no relation to the present recrudescence. He regards it probable that a very large proportion of the "grippes," "malarias," "typhoid fevers," etc., mentioned in the history charts, represent in reality the acute constitutional manifestations of early tubercular disease. Other points of importance in taking the history are questions of states of grief, worry, care, great mental anxiety,

frequent parturition and lactation, insufficient food, unsanitary surroundings, or anything that tends to lessen the resistance. Harbitz (12) has recently emphasized the importance of careful inquiry into the early history of tuberculous patients with regard to enlarged lymph nodes in childhood. That progressive tuberculosis often starts in enlarged nodes in childhood is demonstrated by the fact that of eight hundred so-called "scrofulous" children discharged from a Danish hospital, after ten years no less than one-third had died of, or were suffering from active tuberculosis, chiefly pulmonary. Again, Rivers (13) in an examination of a series of cases of pulmonary tuberculosis has found the percentage of mouth breathers to be 19.4, or practically one-fifth of all cases examined. Dr. Emil Mayer (14) has called attention to the importance of examining lymphoid growths removed, and cites a case in which an early diagnosis was established by the positive findings in adenoid tissue removed from the pharynx of a young lady referred to him. That lymphoid tissue is readily susceptible to tubercular infection is assigned by Swain (15) as a possible cause for the lungs receiving the final infection, since Miller, of the University of Wisconsin, has demonstrated the presence of islands of lymphoid tissue well down toward the lobules of the lungs, the most common seat of tubercular infection being around the posterior branch of the right superior bronchiole. And after all is said regarding anamnesis, we must remember, as Cornet remarks, that a healthy family and personal history should not prevent a diagnosis of tuberculosis if other findings warrant it, nor can a thoroughly negative anamnesis in any way militate against the actual presence of the disease.

As has already been stated, very early pulmonary tuberculosis presents few symptoms upon which we can rely as diagnostic aids. Maragliano (16) has proven by his inoculation experiments that the changes wrought in the organism are due to two sets of poisons, the one known as "toxins" being the secretions of the bacilli, and the other, "proteins," being contained in the bodies of the bacilli themselves. The effect of the proteins is the most pernicious in that they have an inflammatory and destructive action on the tissues with which they come in contact, due to the necrotic acid of de Schweinitz and Dorset, thus having a disturbing action on the vasomotor innervation and on the trophic nerves and their terminal centers, creating considerable elevation of temperature. Upon the readiness with which are formed in the blood of the organism antitoxins and antibodies depends the success or failure of the battle with the invading

germs. Since these toxic proteins can only be thrown off by the broken down tubercles it is readily seen that marked symptoms can appear only after considerable time has elapsed since the primary invasion. Bridge (17) believes that in the presence of loss of weight, loss of appetite and cough, it is reasonable to suspect the existence of tuberculosis. Likewise Walsh (18) declares that whenever there is a story of loss of weight with a cough persisting under ordinary treatment beyond ten days to two weeks, in an individual already under weight, a diagnosis of incipient pulmonary tuberculosis is justifiable, even with negative pulmonary findings. Acceleration of pulse is rated by the same author as one of the earliest signs, occurring often before there is any rise in temperature whatever, and he regards an habitual pulse rate above ninety as significant of tuberculosis in some part of the body. The slightest exertion often suffices to increase the pulse rate twenty to thirty beats. Although the early development of tuberculosis does not always produce a definite rise of temperature, yet when a careful study of the twenty-four hour temperature curve reveals a variation of more than one and one-half degrees F. above the early morning temperature, pulmonary tuberculosis should be suspected. It has been observed that in the early cases the pulse and temperature may only show variations after exertion or at periods of physical stress, as during menstruation, and advantage should be taken of such adventitious times for our examination. Along with the tachycardia there is usually a lowered blood pressure, due probably to the depressant influence of the tubercular toxins. Intensification of the second pulmonic sound is often mentioned as a diagnostic aid, although the statistics of the Henry Phipps Institute do not bear this out. Brehmer regards diminution in the size of the heart as a forerunner of the disease, but this point is likewise disputed. The cough is a reflex phenomenon and in the early stages is described by Cornet as only a slight hacking and hawking, occurring almost exclusively in the morning. Sticker believes that a reddening of the gums, especially in young individuals, offers one of the earliest signs of tuberculosis. Sweating is usually a later symptom. The flush occasionally described is probably a circumscribed vasomotor disturbance. Pityriasis versicolor has been found by Bertrand (19) so frequently associated with tuberculosis, even in its incipiency, that he invariably examines for the latter condition in the presence of the former. The blood picture in the early stages is usually that of a moderate anemia, slight decrease in the number of red cells, a somewhat diminished hemoglobin percentage, with

little or no change in the leucocyte count; hence its rather close resemblance to chlorosis. Symptoms referable to the alimentary tract occur in the majority of cases and often furnish the earliest indication of the disease. These may consist of anorexia, nausea, indigestion, distention or vomiting. Klemperer found hyperchlorhydria in the early stages, giving rise to sluggishness of the lower bowel. Diarrhœa may occur early in one of the masked forms and may be accounted for by finding the bacilli in the feces and is usually due to the swallowing of sputum by children, idiots or the insane. In the early disease Cornet finds the urine typically normal, and like most present day authorities, regards the diazo reaction mainly as of prognostic import. The symptoms referable to the nervous system may begin with a sort of weariness, lessened endurance, an aversion to work and a failure to enjoy either business or recreation. From this they may go on to irritability, vacillation or obstinacy, depression or melancholia. Such patients are exceedingly prone to suggestion and are apt to reflect the mental attitude suggested by the physician. Neuritis and neuralgia are common, as are headaches, often associated with eye symptoms, as nystagmus, loss of power of convergence or unequal dilatation of the pupils due to involvement of the sympathetic on the diseased side. The reflexes are usually exaggerated and the ulnar reflex, consisting of contraction of the abductor minimi digiti upon scratching with a sharp instrument the skin on the ulnar side of the forearm, has frequently led McCarthy (20) to the discovery of an unsuspected tuberculosis. Myoidema often occurs early but is also frequently present in typhoid, carcinoma of the breast and other infections. The syndrome of Grave's disease is sometimes present. Slight hoarseness occasionally precedes all other symptoms and is probably due to pressure of enlarged nodes on the vagus.

Even with a negative anamnesis the patient should be sufficiently undressed and the chest thoroughly examined whenever the symptomatology suggests intrathoracic disease and Janeway (21) advises at least four or five examinations before a person should be pronounced free from the disease. Inasmuch as the early stage is not associated with any alteration in the external appearance, inspection offers little aid save perhaps a slightly diminished excursion, and decreased mobility over the apex and upper ribs, the favorite site of the localization of the disease. In regard to the general outline of the thorax, Woods Hutchinson (22) and others have pointed out that it is not the shallow, flat chest that is most susceptible to

tubercular infection, and it is the large lung, the lung that is not used, that is oftenest attacked by this disease. The only value of palpation in the early stage is to emphasize somewhat the diminution of motion on the affected side. Likewise percussion in the earlier stages does not help very materially, for as been pointed out by Cornet, (23) areas at the surface must have attained the extent of four to six c. m., and a depth of two c. m. before they are capable of altering the normal pulmonary resonance, and flatness is produced only by foci of at least five c. m. depth; hence the fallacy of expecting alterations of such magnitude in the early stage. It has recently (24) been emphasized in rather pointed language that "the physician who waits for dullness on percussion before diagnosing tuberculosis, has waited for the whole clinical house to fall upon him." Auscultation is regarded as furnishing perhaps the most important and reliable method of physical diagnosis, and yet Cornet (25) tells us that it is only when the tubercles have invaded a large number of alveoli and bronchioles, in other words, only months after the primary infection, that we are able to detect any changes by auscultation. Perhaps the earliest respiratory sign of beginning tuberculosis is enfeebled breath sounds or a slightly roughened, harsh, respiratory murmur, audible during expiration, or the expiratory sound slightly prolonged. Occasionally a few small, crepitant rales at the apex will early suggest tuberculosis and Wells has suggested the internal administration of potassium iodide to develop these rales when not otherwise audible. The consensus of opinion seems to be that about the only value of the x-ray in this field is to mark the diaphragmatic excursion, and this can be done equally well by the Litten phenomenon and posterior percussion. In some cases animal experimentation would prove of value, although rather a prolonged and laborious method.

We come at last then to what has become probably the most valuable diagnostic aid we have for the obscure cases, viz.: the injection of Koch's tuberculin. Most authorities agree in the use of the old culture products since it is the older cultures which produce the tuberculins, while the younger ones yield the toxins. The dosage, as given by Cornet, is from one to seven m. g., never more than ten. The reaction consists of malaise, headache, chill, pain in back, rise of temperature of at least two degrees F. above previous maximum temperature, these phenomena occurring in from six to twenty-four hours. In the presence of tuberculosis the reaction is positive in fully ninety-five per cent. of all cases. Tuberculin should never be

given in the presence of fever or other symptoms of active tuberculosis. Von Ruck (26) declares, however, that if given in excessive doses in healthy individuals, subcutaneous injections of tuberculin, sterile peptone or albumoses will produce a fever curve not unlike that of the streptococcus. He regards the local reaction as of more importance than the general symptoms. Since beginning the dosage with 0.5 m. g. he has seldom noted the reactions with high rises of temperature and distressing general symptoms, and over one-half of all his reactions have been in response to 2 m. g. or less. Köhler and Behr (27) relate their experience of having obtained reactions to sham injections for tuberculin in ten out of forty cases tried and in six out of twenty who were given merely a puncture without injection of any fluid, the temperature rose from 0.4 to 2.4 degrees C., hence the advisability, they think, of previous sham injection before using the tuberculin. However, the tuberculin test is becoming more and more firmly established and should be made use of in all obscure cases. Cornet attaches little significance as yet to the serum reaction of Arloing and Courmont.

Differential diagnosis must be made from other pulmonary conditions, such as pleurisy, bronchitis, pulmonary gangrene, abscess of lung, pulmonary syphilis, cancer of the lung, echinococcus infection, and pulmonary actinomycosis and anthrax. The differential diagnosis depends upon careful anamnesis, physical signs and symptoms, and the tuberculin test, and the same diagnostic factors serve for the differentiation from typhoid or other systemic infections.

BIBLIOGRAPHY.

1. Cornet—Tuberculosis, 1904, pp. 360-473.
2. Am. Medicine, Dec. 4, 1904; pp. 1010-1012.
3. First Annual Report of the Henry Phipps Institute for the Study, Treatment and Prevention of Tuberculosis; 1905; pp. 141-154.
4. Jour. Am. Med. As.; May 27, 1905; pp. 1706-8.
5. Ft. Wayne Med. Jour. Mag.; Dec. 4, 1904; pp. 412-17.
6. Med. News; June 29, 1901.
7. Ibid. No. 3; pp. 121-140.
8. Med. Record; May 20, 1905; pp. 770-3.
9. Int. Clinics, Vol. 1, 14th Series; pp. 75-87.
10. Ibid., No. 1; pp. 360-473.
11. Med. Record, Jan. 7, 1905; pp. 1-5.
12. Jour. Am. Med. As.; May 20, 1905; pp. 1616-17.
13. British Med. Jour.; May 6, 1905.

14. Jour. Am. Med. As.; May 6, 1905; pp. 1425-34.
15. Ibid., No. 14.
16. Ibid, No. 3; pp. 195-255.
17. Ft. Wayne Med. Jour., Mag.; pp. 412-17.
18. Ibid, No. 9.
19. Semaine Medicale; Vol. 25, No. 13.
20. Ibid, No. 3, p. 75.
21. Med. Record; June 3, 1905; p. 874.
22. Med. Record; May 13, 1905; p. 752.
23. Ibid, No. 1.
24. "Early Diagnosis of Pulmonary Tuberculosis"—Ill. State Board of Health; 1905.
25. Ibid, No. 1.
26. "Clinical Study of 261 Cases of Pulmonary Tuberculosis Treated at the Winyah Sanatorium, Asheville, N. C., 1903-4." Karl and Silvio Von Ruck.
27. Deutsches Archiv f. Klinische Medicin.; Vol. LXXXII, No. 4.

Genito-Urinary Tuberculosis.*

BY
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The subject of genito-urinary tuberculosis is such a large one, that only the most important phases of the topic can be considered in a paper of this length.

Like tuberculosis in other organs, the disease may develop independantly or secondarily to the disease elsewhere. As a matter of fact, in the vast majority of cases of tuberculosis of the organs under consideration, there is an original focus, which may be very insignificant, elsewhere in the body. It is not very often seen as a complication of pulmonary tuberculosis, but occurs more frequently after tuberculosis of bones and joints.

The relation between genital tuberculosis and that of the urinary passages is by no means clear. It is certain, however, that the two forms of the disease do not always occupy the relation of cause and effect. They may exist independently. The prostate is the first to suffer when a urinary tuberculosis extends outside of these organs; just as it also bears the first brunt of the attack when a genital tuberculosis begins to expand. Israel has had three cases in which the testicle and kidney were affected while the bladder was healthy.

*Read before the Fort Wayne Medical Society, June 20, 1905.

It is evident that there may be simultaneous involvement of two or more portions of the same tract. The old idea that tuberculosis of the genitals is always a preliminary stage of vesical and renal tuberculosis is an erroneous one.

It has troubled the minds of observers for many years as to how, using the words of Osler, "a non motile bacillus, contrary to the laws of gravity, ascends against an almost constant current of urine flowing in the opposite direction." Baumgarten, who undertook the experimental study of the question, injected virulent colonies of tubercle bacilli into the urethra of rabbits and produced tuberculosis of the urethra and bladder, but never of the kidney or testicle. He concluded that the bacilli never multiply, either in the urine or in the seminal fluid, and as they are non motile they can only follow the stream and not swim against it, so an ascending infection along the ureter and a descending one along the vas do not occur. He admitted, however, that the disease might be transmitted through the lymphatics. As it is now believed that the lymph stream in the ureter flows downward instead of upward, this method of infection has little practical significance. It seems to me that Baumgarten's conclusions are not justified by the facts, and that his results prove nothing beyond the fact that such injections will produce a cystitis and a urethritis in rabbits. Tubercle bacilli alone can not give rise to tuberculosis, micro-organisms do not act upon healthy tissue, there must be a predisposing hereditary or acquired cause, so one could hardly expect to produce lesions in a kidney or an epididymis in the absence of accessory pathological conditions. Another investigator, Delli Santi, produced tubercular epididymitis in the dog by injections of tubercle bacilli into the urethra after first ligating the spermatic vein and thus producing a venous stasis.

The idea of an ascending infection will not be given up as long as we see an extensive tuberculosis of the bladder and ureter combined with a superficial disease of the renal pelvis. Some authorities, as Tuffier, are of the opinion that every tuberculosis of a second kidney is due to an ascending infection—this opinion certainly lacks proof. Kocher is an advocate of the theory that in many cases a tuberculosis of the kidney spreads downward and involves the epididymis.

The underlying causes of uro-genital tuberculosis are the predisposing causes of tuberculosis elsewhere. Heredity undoubtedly plays some part, as these organs have been found diseased in the foetus and tuberculosis of the testicle is not uncommon in infancy. Kocher believes that in those cases in which tuberculosis of the

testicle appears in otherwise healthy individuals, that the bacilli exist in the testicle at the time of birth. Uro-genital tuberculosis is most common during the period of greatest sexual activity, viz.: thirty to forty years. It affects the male about three times as often as it does the female, owing, no doubt, to the more intimate relationship existing between the genital and urinary systems in the male. However, Schede states that three-fourths of the cases of primary renal tuberculosis occur in women. Traumatism would, of course play some part. Murphy attributes to gonorrhoeal epididymitis or posterior urethritis the most predisposing factor in the development of tuberculosis of the testicle and epididymis.

As to the paths of infection. I have already discussed the extension of the process from the genital to the urinary and from the urinary to the genital systems. There is no doubt but what the blood stream is by far the chief path through which the infection is transmitted. When tubercle bacilli are circulating in the blood stream if some portion of the genito urinary system happens to be a *locus minoris resistentia* a localization at this point would be expected. There is no known reason why any portion of the system should not become infected, still the kidney and the epididymis are the usual sites. Primary vesical haematogenous tuberculosis is so rare as to be almost a phenomenon, a primary lesion of the ureter has never been described. The location of the primary focus in the vesicles, testes proper and urethra are also events of extreme rarity. Koenig is almost alone in the opinion that the prostate is the original seat of the disease in many cases. The frequent occurrence of all types of inflammation in the kidney, together with its function as the chief means of exit for pathogenic bacteria of all kinds which have found their way into the circulation, would lead us to expect the localization here. As the spermatic artery divides opposite the epididymis, and as the vessels to that organ are smaller and more tortuous than those of the vas or testicle, the blood stream is consequently slower in the epididymis, which anatomical arrangement is said to predispose to the development of tuberculosis. Some surgeons believe that tuberculosis of the epididymis is most common during the period of greatest sexual activity because at this time there is a functional congestion of the organ. The importance of congestion as a causative factor in tuberculosis of the epididymis is certainly of interest when we recall two things: 1st, the prevalent idea that chronic heart lesions by causing a congestion of the lungs acts as a preventative against the development of the disease here,

and, 2nd: Biers treatment of tubercular joints by causing an artificial congestion.

The infection may also travel by way of the lymph stream and by direct extension from neighboring organs and tissues. The latter method is possibly an important one in the female, as a tuberculosis of the Fallopian tube sometimes develops secondarily to a peritoneal tuberculosis. Infection during coitus, by way of the urethra is a possibility.

The morbid anatomy, of course, presents a varied picture, and is in brief but a repetition of tubercular processes elsewhere. In the kidney there is generally a stage of miliary eruption, the tubercles as a rule beginning in the pyramids; the tubercles may fuse, caesate a secondary infection with suppuration may take place, and if the ureter is blocked by detritus or contracted, a pyonephrosis occurs. Cicatrization and calcification, or complete destruction of the kidney may be the final results. The ureter shows ulceration of its inner layers, with infiltration and thickening of the outer, so it is changed into a rigid tense tube with a great tendency to contract and become obstructed. In the bladder the tubercle bacilli, like other bacteria, settle to the lowest layers of urine and hence we see the first lesions in the region of the trigonum. The lesions may be superficial or ulcerative, and are generally found in groups. In the epididymis, the intertubular connective tissue is first attacked, and the other structures are gradually involved by an extension of the process by continuity of tissue. The pathological changes are slow or rapid, depending upon the general health of the patient and the presence or absence of a mixed infection.

From the various pathological lesions that have been mentioned we would naturally conclude that the disease may present a wide variety of symptoms. It may exist with no symptoms, and, in fact, in the majority of cases, during the early stages the patients do not feel seriously ill, but complain merely of being a little depressed, easily fatigued, and dyspeptic. A urinary tuberculosis frequently exists with a slightly turbid urine as the only symptom. A typical case of uro-genital tuberculosis presents a combination of pyuria, hematuria, polyuria, and increased vesical tenesmus. It is well to remember that severe vesical symptoms are quite common from a pure renal tuberculosis. In vesical tuberculosis hemorrhages from the neck of the bladder are quite common, the presence of nodules and tenderness would be determined on rectal palpation. When the kidney is diseased we might find a renal tumor with tenderness,

and times during which there is a retention of urine in the diseased kidney and clear urine from the other one. The urine is generally acid as the tubercle bacilli do not favor ammoniacal fermentation. The bacilli may be found in the urine, but care must be taken to avoid confusion with the smega bacillus. It is claimed that fragments of debris in the urine about the size of a pin head are pathognomonic of tuberculosis. The cystoscope reveals the presence or absence of vesical disease, and in renal trouble we may find a puffiness and injection of the mucous membrane around one ureteral orifice. Catheterization of the ureters is contraindicated because of the great danger of infection. In genital tuberculosis there is an enlarged tender nodular condition of the epididymis, vas, prostate, and seminal vesicles; a thin milky urethral discharge is common. The bacilli have not been demonstrated in the semen.

There are no signs nor symptoms, aside from the presence of Kochs bacillus, which are absolutely diagnostic. A local reaction following an injection of tuberculin is probably characteristic. This local reaction manifests itself by an increase of pain, tenesmus swelling, and greater tenderness of the affected organ or organs—and possibly an increased number of bacilli in the urine.

In the treatment it is well to bear in mind the great value in this as in other forms of tuberculosis of diet, fresh air and rest. Surgery of course aims to eradicate the focus of disease. In early genital tuberculosis an epididimectomy is the operation of choice, and in later stages a high vasectomy with a castration; when lesions of the prostate and vesicles exist they usually disappear after the primary lesion has been removed. A nephrectomy is indicated in renal disease, provided of course, the opposite kidney is functionally capable. Extirpation of a kidney may be advised even in the presence of tuberculosis of the opposite organ or of the bladder. The whole bladder has been removed, together with one kidney, with success. When the ureter is involved the best treatment is to remove it entirely down to its entrance into the bladder. The local treatment of vesical tuberculosis is usually inefficient and surgical measures are not advisable.

SOCIETY PROCEEDINGS

Fort Wayne Medical Society.

Meeting of May 9, 1905.

Called to order by the Secretary, with 18 members and guests present. On motion, Dr. A. P. Buchman was called upon to preside. Minutes of previous meeting read and approved.

CASE REPORTS—Case 1. *Amblyopia Due to Blood Changes Incidental to the Pre-Pubertic Development*—reported by Dr. K. K. Wheelock. (Patient exhibited). Patient, a boy twelve years of age, with appearance of good health, came under observation in May, 1904, as a result of defective vision amounting to only 15-70 for distance in either eye, and Jaeger No. 11 at the near point with either eye, and not improved by glasses. Patient had had no discomfort and exhibited no inflammation of the eyes. The examination of the fundus showed a "shot silk" appearance as shown by streaks of light over the retina. The vessels were frayed, but there were no hemorrhages. No yellowishness of the fundus as exhibited in chlorosis. Field of vision contracted, that for form and white being the largest. The field for blue was about five degrees smaller than for white, and the field for red ten or fifteen degrees smaller than for white. The field for green was still smaller than for red. The blood examination by Dr. N. L. Deming on May 26, 1904, showed red cells 2,500,000; white cells 4,000; hemoglobin 40%; specific gravity 1038. Diagnosis—Amblyopia resulting from optic nerve exhaustion due to blood change incidental to pre-pubertic development. Patient was taken from school, given plenty of physical exercise, out of door air, generous diet, and iron tonics. Up to February, 1905, patient had made no satisfactory gains. The field of vision had not improved, neither had the sight. At this time the use of galvanism, as recommended by Dr. L. Webster Fox, was instituted under the direction of Dr. L. P. Drayer. After nineteen seances there was a decided improvement in the field of vision as well as the sight, and then for the first time the patient was placed on strychnine in large doses, and peptomanganate of iron. On May 5, 1905, Dr. Drayer reported the blood as follows: Red cells 3,800,000; white cells 12,000; hemoglobin 85%. In making a diagnosis in this case hysteria may be excluded because there is a constant

relation between the fields of vision. If it were hysteria one would find the color vision jumping outside the white field, and there would also be variations in the sight.

CASE 2. *Obstruction of the Bowel*, reported by Dr. M. F. Porter. The patient, aged 50, was taken with a severe pain in the abdomen five days after a slight injury. On examination the man was found septic and with tenderness in the right iliac region, and a fluctuating tumor the size of a small egg in the right inguinal region. This tumor was not reducable. The opening of the hernial sac was followed by a gush of pus. This was drained by two drainage tubes. The obstruction of the bowels was overcome by drainage, the bowels moving freely after the operation. The man died of sepsis on the sixth day. On post-mortem it was discovered that the trouble had originated from appendicitis, and from the liver down to the bottom of the pelvis there was one large pus cavity. Dr. Porter said that it was the first case in which he had seen an abscess originating in the abdomen pointing in the hernial sac and draining that way. He has had a similar case in which the fluid in a circumscribed cavity, resulting from a tubercular peritonitis pushed the peritoneum before it into the inguinal canal, forming a hernia, the case being reported in the *Journal of the A. M. A.*, Sept., 1902.

CASE 3. *Chylous Cyst of Mesentery Producing Volvulus*, reported by Dr. M. F. Porter. Patient, a male, 18 years of age, had had on various occasions pain in the right lower aspect of the abdomen. On this occasion the pain was not relieved by several doses of morphine, and as a last resort chloroform was given to relieve the patient, pending operative interference. A diagnosis of appendicitis had been made and was concurred in by Dr. Porter following his examination. The fact that morphine did not relieve the patient should have caused doubt as to the diagnosis of appendicitis. When seen the belly was hard, tympanitic and generally tender. Upon opening the belly the appendix was found to be in normal condition. Upon examining the small bowel it was discovered that a volvulus existed caused by a chyle cyst of the mesentery. The bowel was resected with the cyst and the ends anastomosed with a Murphy button. The contents looked like rich milk or poor cream. Operation was done a week ago, and the patient is now in good condition with indications of making recovery.

In discussing Dr. Porter's cases Dr. E. J. McOscar said that he recently saw a case which five or six days ago had walked into a physician's office making request to have an opening in the right

side. There was fullness in the right abdominal region. On operation two pints of pus was secured. The pus had burrowed to the median line from the pubes up to the liver and was pointing over McBirney's region.

Dr. Chas. E. Barnett, commenting on Dr. Porter's first case, said that if it was a case of hernia it must have been a case of hernia of the appendix or cecum. He said that a few years ago he operated on a case upon which he did both appendectomy and herniotomy, as the appendix was in the hernial sac. Concerning Dr. Porter's second case he said that he thought the cyst might just as well have been removed without resecting the intestine.

In closing, Dr. Porter said that the reason for not removing the cyst in the second case and leaving the intestine was on account of the location of the cyst. Situated as it was in the folds of the mesentery the removal of the cyst would almost certainly have brought about gangrene of the bowel. Furthermore he was afraid he might again produce obstruction.

CASE 4. *Cyst of Left Ovary, and Advisability of Removing Healthy Appendix*, reported by Dr. C. E. Barnett. The patient was operated for a cyst of the left ovary free from adhesions. The cyst contained a jelly-like substance which had to be wiped out. The pedicle was ligated and cyst removed. On the right side a small ovarian cyst was found, and this was also removed. As there was a gall stone history in the case the gall bladder was examined but no stenosis found. The appendix was examined and found normal, but the question came up as to the advisability of removing it. Since the appendix belonged to the patient, and the attending physician represented the patient, the latter was asked as to whether the appendix should be removed or not. The attending physician did not give his consent for the removal and consequently the appendix was not disturbed. Dr. Barnett said that it seemed to him that as the patient put himself in the hands of the surgeon, the surgeon should be the judge as to what should be done and what should not be done.

In discussing the case Dr. Porter said that the superior court has decided that a surgeon has no right to remove the appendix without the consent of the patient. The consent of the patient, however, can be obtained in more than one way. Dr. Porter says that he always has an understanding to the effect that he is to make the operation according to his best judgment. Either in a general or explicit way there must be consent of the patient before removal of the appendix is attempted.

Dr. K. K. Wheelock said that in this line he had had a unique experience. The patient had for several years suffered from a discharge from the nose. Polypi had been removed, local treatment given, but with no relief. Upon examination the patient was told that local treatment would be of no avail, and that it would be necessary to give a little surgical treatment. Consent was obtained, and the necrosed ethmoidal cells were curetted. The nose got along nicely, and later a bill for the services was sent to the patient, and followed by refusal of payment on the ground that no information had been given as to the exact nature of the operation.

Applications of Drs. L. L. Culp and Edward F. DeVaux were received, and on motion referred to the Board of Censors.

Bill of Dr. J. B. McEvoy for rheostat was presented, and on motion was allowed.

Dr. K. K. Wheelock suggested the advisability of establishing a sinking fund for the protection of indigent members of the society. The motion was made and carried that the president appoint a committee to draft plans for carrying out his idea. The president appointed Drs. Porter, Wheelock and B. Van Sweringen.

Adjourned.

J. C. WALLACE, Sec'y.

The Mississippi Valley Medical Association.

The 31st annual meeting of this Association was held in Indianapolis on Oct. 10, 11 and 12, under the presidency of Dr. Bransford Lewis, of St. Louis. The chairman of the committee of arrangements was Dr. Frank B. Wynn, of Indianapolis, and the place of meeting, the German House, admirably adapted to the purpose. The address in medicine was given by Dr. Arthur R. Edwards, of Chicago, his subject being "*Certain Phases of Uremia, Their Diagnosis and Treatment.*" The address in Surgery was given by Dr. W. D. Haggard, of Nashville, his subject being "*The Present Status of Surgery of the Stomach.*" Other interesting papers were presented by Daniel R. Brower, of Chicago; James Moores Ball, Saint Louis; Alfred C. Croften, Chicago; Joseph Rilus Eastman, Indianapolis; Alex Hugh Ferguson, Chicago; C. H. Hughes, Saint Louis; G. Frank Lydston, Chicago; C. A. L. Reed, Cincinnati; Frank P. Norberry, Jacksonville; John Punton, Kansas City; G. W. McCaskey, Fort Wayne; E. B. Smith, Detroit; Fenton B. Turk, Chicago; H. O. Walker, Detroit; and T. C. Witherspoon, Saint Louis. The attendance was very gratifying, and the local physicians of Indianapolis entertained the visitors in a very satisfactory manner. The next meeting is to be held at Hot Springs, Ark., under the presidency of Dr. J. H. Carstens of Detroit.

MEDICAL REVIEWS

Department of Medicine and Therapeutics

In Charge of **George W. McCaskey, A. M., M. D.**
Professor of Clinical Medicine in the Fort Wayne College of Medicine, Ft. Wayne, Ind.

Counterirritation.

John W. Wainwright tells us that local irritation cannot exist without causing general changes which affect the entire organism. A distinct relation exists between irritation of an internal organ and that part of the skin supplied by the same segment of the brain or spinal cord. The nervous influence from the diseased organ affects the superficial areas supplied by the sensory nerves from the same segment of the cord. The most correct explanation of the action of counterirritation is through the reflex effect of sensitive cutaneous nerve areas on the deeper parts. Counterirritation is used to lessen congestion and inflammation of the deeper organs, to relieve pain, and to promote the absorption of the deep products of inflammation. Rubefacients produce a mild redness and irritation, and do not destroy the skin; they are used in functional disturbances. Vesicants cause structural changes of the skin and underlying tissues, and are used in chronic conditions or when inflammation has produced a permanent change in organs or tissues. Pustulants cause a pustular eruption and are seldom used. Blisters of various kinds are useful in many conditions. The ethereal tincture of capsicum forms an elegant and effective pustulant. Blisters are contraindicated in the aged, in gout, diabetes, and debilitated conditions, and in pregnant women. They should never be applied to the mamma or scrotum or over bony prominences. They are applied over a point intimately connected by nerve fibers with the seat of inflammation. The actual cautery is one of the best means of counterirritation.—*Medical Record*, September 30, 1905.

Lactic Acid in Gonorrhea.

S. Chandler, Philadelphia (*Journal A. M. A.*, October 7), advocates the use of lactic acid for the treatment of gonorrhea of the cervix as preferable to other methods. He has employed it in 34 cases, which are tabulated. His method is as follows: Cleanse the vagina and cervix thoroughly with warm water and cotton soaked in a water solution (four to six ounces) of pyroligneous acid. Expose the cervix

by drawing it downward and into view by an ordinary long tenaculum; then take an ordinary hypodermic syringe loaded with pure lactic acid, and inject just beneath the membrane a few drops of the acid. Continue this until the whole of the cervix is exposed as the superior and interior lip is injected. It may be done in one sitting or in a nervous case, if desired, in two or three sittings. He concludes from his experience with this and other methods that lactic acid cures cervical gonorrhea, has no ill effects and prevents the spread of the disease into the body of the uterus if used sufficiently early. Ordinary douches and painting the cervix give only temporary relief; it is better to destroy the cervical glands, and this should be done as soon as a positive diagnosis is secured. Both the discharge and the cervical membrane should be examined before excluding gonococci, which are the cause of most chronic discharges. This method of injecting the cervical glands with lactic acid, he believes, is the best prophylactic against future disease of the tubes, etc. A too deep injection of the lactic acid may cause an annoying, though not a dangerous, slough, lessening the good result; caution against this is, therefore, advisable.

Central Ataxia in Childhood.

A. W. Fairbanks, Boston (*Journal A. M. A.*, October 7), discusses the condition occasionally observed in children characterized by muscular inco-ordination, delayed voluntary muscular action, unsteady gait, slow or hesitating speech, occasionally explosive, nystagmus, tremor, involuntary movements, choreiform or otherwise, deficient energy and later paralysis, muscular spasm and contractions. Other less characteristic symptoms are vertigo, headache, optic atrophy, pupillary anomalies, various mental and sensory symptoms, trophic changes in muscles and more rarely, sphincter weakness and cutaneous trophic changes. Some of these symptoms are later than the others, and may mask the earlier symptoms of the disease. Fairbanks thinks tendon reflex anomalies are simply a matter of duration or extent of the central lesion and not essential to the symptom complex. The variations from the original type of Friedreich are remarked, and the author refers to the cases reported by Everett Smith, Nonne, Menzel and Sanger Brown as most typical and interesting of the type here discussed. In the autopsies that have been made nearly all the subjects showed extreme degenera-

tion of the posterior parts of the cord and the posterior nerve roots were more or less degenerated in all. In all but one case there was some atrophy of the medulla and cerebellum and atrophic changes in certain of the cranial nerves. The pathology of the condition is discussed, and he points out that the latest formed portions of the cord are the seat of greatest degeneration. He thinks that the defects indicate a process supervening on a developmental insufficiency, either of structure or inherent vitality of the nervous system. In Nonne's anomalous case there was general smallness of the entire nervous system without special signs of degeneration.

DEPARTMENT OF SURGERY GYNAECOLOGY *and* OBSTETRICS

In Charge of Miles F. Porter, A. M., M. D.
Professor of Surgery and Gynæcology in the Fort Wayne College of Medicine,

The Cysts of the Spleen.

W. A. Bryan, Nashville, Tenn., (*Journal A. M. A.*, Sept. 2), reports a case of simple multilocular splenic cyst of large size removed by splenectomy. The cystic spleen weighed $2\frac{1}{2}$ pounds, and the only etiologic antecedent known was malaria. He reviews at length the subject of splenic cysts, and gives brief abstracts of the cases he has collected from the literature. While small cysts may give no trouble, splenectomy, he holds, is advisable when the organ is functionally destroyed, and not so completely adherent as to make its removal dangerous. The only other recourse is open cyst drainage, except where one can be assured that the growth is serous or hematic, in which case aspiration once or twice and removal of all the fluid may suffice to effect a cure.

[Aspiration in this and similar conditions within the abdomen is uncertain, unscientific, unsafe, and unsurgical, and should be condemned.]—ED.

To Locate the Stomach.

M. J. Knapp (*Med. News*, June 10), says the stomach may be quite accurately located by first having the patient drink a glass of cold water, when, after the lapse of about half a minute, the examiner's hand outlines the cooler area, which will be the stomach area. If one waits too long the cool area will extend beyond the stomach

or, the water becoming warm, it will not be discernable. The physician's hand must be warm, the patient examined either sitting or standing, with the abdomen covered by single light layer of clothing.

Cancer of the Lip.

Dr. W. W. Grant, of Denver, at the Portland meeting of the A. M. A., described (*Jour. A. M. A.*, Sept. 30, 1905) a new method for restoring the lower lip after excision therefrom of cancer which we think superior to any method hitherto devised. Photographs of his patients also showed the superiority of the method. The mass is widely removed by a quadrangular excision. From the lower outer angles of the wound left incisions are carried downward and outward across and below the under border of the jaw. The side flaps are then thoroughly loosened from underlying structures, and the lymphatics all removed, but the chin flap is not loosened at its fixation and helps to retain the new lip in position. If much tissue has been removed longitudinal incisions are made at each angle of the mouth in such a way as to make it possible to unite the mucous membrane to the skin when the flaps are brought together in the center, thus preserving the vermillion border. A submental incision may be made if necessary for removal of these lymphatics.

Malposition of the Appendix as a Cause of Symptoms Simulating Appendicitis.

Dr. Jos. A. Blake, of New York, thinks (*Annals of Surg.*, Sept., 1905) that malposition of the appendix explains many of those cases in which attacks of pain and discomfort in the right iliac region is complained of without fever, marked tenderness, and muscular rigidity. He reports several cases upon which he operated in support of his opinion. In all the operation proved curative. In none were there evidences in the appendix that proved past or present inflammation. In all there was malposition of the appendix, due to the meso-appendix. The most common condition was a short meso-appendix with a high attachment which prevented the normal descent of the caecum, or suspended it as it were. The pain is accounted for on the ground that the kinking of the bowel or appendix interferes with the circulation, or the passage of gas. The cause for the short meso-appendix is a lack of development of the vessels therein. This constant tug on the appendix and caecum may also cause a true appendicitis.

DEPARTMENT OF MATERIA MEDICA, THERAPEUTICS AND PEDIATRICS

In Charge of Budd Van Sweringen, M. D.

Professor of Theory and Practice of Medicine and Clinical Medicine in the Fort
Wayne College of Medicine.

Sodium Glycocholate.

H. Richardson, (*N. Y. Med. Jour.*, Sept. 30, 1905) deals with the action of sodium glocholate on the system in those suffering from various affections of the liver.

The physiological action of bile salts (glycocholate and taurocholate of sodium) are summed up as follows:

1. Injected even in small doses into the blood stream they produce a widespread disintegration of the red corpuscles with a liberation of hæmoglobin; brought into contact with cells of the body they cause disintegration.
2. They have a cholagogue action; in fact, are the only substances known to possess the power and actually to cause an increased flow of bile, both solid and liquid constituents being increased. None of the drugs of the pharmacopœia increases the elimination of bile.
3. The presence of bile salts in the blood acts as a stimulus to the liver cells.
4. In small doses they act by increasing coagulation.
5. In large doses they arrest coagulation.
6. In very small doses they act as vasomotor dilators.
7. In large doses they act as vasoconstrictors.
8. They reduce motor and sensory irritability.
9. They slow the heart beat by direct action on the heart muscle and the cardiac ganglia.
10. They act on the higher cerebral centres, causing coma, stupor, and death.
11. They act as solvents for cholesterin and bilirubin, thereby preventing the precipitation of these substances and consequent formation of gallstones.

The experiments of Hawley and Barrett are recalled. Under aseptic conditions large gall-stones were inserted into the gall-bladders of dogs. In from six to twelve months these were found to have disappeared by absorption, showing that normal bile has the power of dissolving gall stones *in situ*.

The presence of the bile salts is necessary to prevent the precipita-

tion of the bile-pigments and cholesterin, by which precipitation gall stones are formed.

It is therefore indicated (glycocholate) in cases where gall stones have been removed to prevent their reformation and may be used as the best known remedy to promote their dissolution.

The glycocholate of sodium is also indicated in all diseases where toxæmia is a factor or hepatic insufficiency exists.

In many cases of malnutrition from want of proper absorption of fats, it will materially aid in building up a patient.

In hepatic colic it is "almost a specific," and in chronic constipation it is of great value.

It may be given in five-grain doses three times a day, although as much as 15 grains may be given without producing nausea. In colic and cholelithiasis it should be kept up for several months.

In arterio-sclerosis it has been used to promote the absorption of the cholesterin in the atheromatous deposits in connection with the administration of the inorganic salts of the plasma.

In diabetes and tuberculosis it aids in the absorption of fats.

Potassium Iodide in the Treatment of Syphilis.

It seems that a sort of campaign has been instituted against the use of potassium iodide in the treatment of syphilis. There are those who say that it is noxious and sometimes dangerous, and, moreover, that it is ineffectual. They would restrict antisyphilitic medication to the employment of mercury. So great an impression have these persons made that M. Pautrier finds himself constrained to champion the maligned iodide in the *Press medicale* for September 9th, and it must be said that he does it effectively.

The iodide is accused of giving rise to such grave conditions as œdema of the glottis and interstitial nephritis, which occasionally prove fatal, to say nothing of its effects on the skin. It is only very exceptionally, says M. Pautrier, that fatal œdema of the glottis has been caused by the drug, or that there is encountered an idiosyncrasy that precludes its safe and pleasant employment. As for nephritis, there is preexisting renal trouble in the cases in which the iodide damages the kidneys, and this can be ascertained before one decides whether or not to prescribe it. It is true also that the drug is apt to disorder the digestion, but its effect can almost always be prevented by varying the mode of its administration. Sometimes it causes great irritation of the eyes, but only when it is used in conjunction with calomel, the two reacting, when eliminated in the

tears, in such a manner as to give rise to the formation of a very irritating iodo-mercurial compound.

As to the charge that potassium iodide is ineffectual, accumulated clinical evidence makes it sure that many of the manifestations of syphilis yield promptly to it when mercury alone acts but very slowly if at all. Especially beneficent is its action on the arteries, which are prone to grave changes as the result of syphilis. Potassium iodide should by no means be given up in the treatment of that disease, though it may quite properly be rated as subordinate to mercury.—*N. Y. Med. Jour.*

To Prevent the Shedding of Hair.

David Walsh, of London, according to an abstract in *Med. Standard*, recommends the following combination to prevent the hair from falling out, stating that it is preferable to an ointment, especially in the cases of women:

R.	Acidi salicylici	℥iii	12
	Acidi carbolici	℥i	4
	Olei ricini	℥iii	12
	Spts. vini rectific. q. s. ad	℥vi	180
M.	Sig: Apply locally once or twice daily.		

—*Jour. A. M. A.*

Therapeutic Value of Hydrochloric Acid in Stomach Affections.

Chase (*Boston Med. and Surg. Jour.*) gave 20 minims of HCl in 90 c.c. of water, two or three times, at fifteen minute intervals, after an Ewald test breakfast. One hour after the meal was given the gastric contents were withdrawn and the acidity tested. Four tests were made. The total acidity was always increased, and in three of the four tests, free HCl was present in appreciable amounts. In one test it was absent. From 15 to 25 minims of HCl were given in 99 c.c. of water three times within an hour after the ingestion of a large meat sandwich, and 300 c. c. of water. Nine tests were made. In from sixty to seventy minutes after the meal was given, the total acidity of the gastric contents was always found increased, but free HCl was never present. Chase also found that the long-continued use of large doses (45 drops, three times daily), of HCl diminished the total acidity. He believes that the HCl has a depressing influence on the gastric acidity which is not generally recognized. Peptic digestion, however, is accelerated by the use of HCl, although in certain conditions large doses in some manner retard peptic diges-

tion. He is of the opinion that while large doses of HCl often alleviate certain symptoms, they never improve any function of the stomach.—*Jour. A. M. A.*

DEPARTMENT OF OPHTHALMOLOGY OTOLOGY, LARYNGOLOGY & RHINOLOGY

In Charge of Albert E. Bulson, Jr., B. S., M. D.

Oculist and Aurist for St. Vincent's Orphan Asylum, the Allen County Orphan Asylum and the U. S. Pension Bureau for Northern Indiana and Northern Ohio; Professor of Ophthalmology in the Fort Wayne College of Medicine, Fort Wayne, Indiana.

The Ear Complications in Cerebrospinal Meningitis.

C. J. Colles, in discussing this subject, first points out the vagueness of the statements of the earlier writers in speaking of this complication. He then shows from the published statistics of more recent observers that it is exceedingly common and states that both European and American statistics prove that one-fifth to one-sixth of all cases of acquired deafness are due to cerebrospinal fever alone, while at times the proportion caused by this disease has been much greater. The opinions of authorities vary, however, as to the aural affection itself and the seat of the lesion. Some consider that the lesion is a central one, but it is more probable, and is now generally accepted, that an inflammatory condition of the labyrinth is the causative factor. The pathology of the lesion is described, and reference is made to the frequent occurrence of acute otitis media in cerebrospinal fever as another, though less important, cause of deafness. The prognosis of the deafness is stated to be a very grave one, and treatment is unsatisfactory, though good results have been reported from the reduction of the labyrinthine pressure by the use of pilocarpine. Of eleven cases of cerebrospinal meningitis recently examined by the author, in only two were subjective or objective evidences of ear diseases to be detected.—*Medical Record*, September 9, 1905.

Eye Injuries Due to Blows from the Corks of Ginger Ale Bottles.

Charles Graef describes three cases in which the eye was struck by the cork of a ginger ale bottle released by pressing back the wire spring holding the stopper in place. The accident caused paralysis of the iris and a "black eye" in one case; in the second, profuse hemorrhage into the anterior chamber, and in the third, commotio

retinæ. Although all of the patients recovered the sight of the eye, the author believes that the public should be warned of this possible source of danger, and that manufacturers be urged to adopt a less dangerous form of stopper.—*Medical Record*, September 9, 1905.

The Extraction of Immature Senile Cataract.

A. E. Bulson, Jr., Fort Wayne, Ind., (*Journal A. M. A.*, September 23), discusses the propriety of operation for the removal of immature senile cataract. He would operate in slowly progressing cases in which there are no contraindications aside from the semi-transparency of the lenses, and in which vision is so far impaired as to prevent the reading of ordinary type, the patient having been fully informed as to the possibilities of second cataract requiring discission and mild postoperative inflammation with delayed recovery. The essentials of a successful operation removing practically all of the cortex with a minimum amount of trauma and subsequent inflammatory reaction, and favoring such after-treatment as will limit the inflammation and promote resorption are: 1. A large corneal section, embracing not less than two-fifths of the corneal circumference; 2, an iridectomy with a fairly large coloboma extending to the ciliary border; 3, a large opening in the capsule by two incisions at right angles to each other; 4, gentle irrigation of the anterior chamber with a sterile normal salt solution, after the extraction of the nucleus, if much cortex remains; 5, the early and free use of atropin, and 6, the use of dionin, after the corneal wound has closed, to promote resorption of lens debris. The irrigation must be done with the utmost delicacy; the method he prefers is that of Lippincott, allowing a continuous stream to flow by gravity through a small specially constructed cannula introduced just within the lips of the corneal wound, the flow being completely under the control of the operator. To anticipate the slight iritis that is likely to occur, he begins the use of atropin at the time of the first dressing, from 36 to 48 hours after the operation. Bulson believes that the final results of removal of immature senile cataracts should compare favorably with the extraction of cataract in any stage. His personal experience with 25 cases has been very satisfactory. The article concludes with a long series of opinions of prominent ophthalmologists, obtained by correspondence, most of which express views largely in agreement with those of the author.

Fort Wayne Medical Journal-Magazine

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EDITORIALS

Filth and Disease.

Fort Wayne is not the only Indiana city that suffers from neglected alleys and careless garbage collectors. Benjamin F. Jackson, a prominent citizen of Indianapolis, is just recovering from an attack of typhoid fever and in a card in the newspapers he attributes his illness to filthy alleys that are tolerated by the municipal administration. The description he gives of existing conditions there is so adaptable to the Fort Wayne situation that the following portion of it is reproduced:

"All up and down the alleys of this city the garbage buckets stand in the rear of every house, festering and rotting. Once, sometimes twice, a week the swill wagon comes along emptying these buckets, but there is always more or less of the rotting stuff left sticking inside.

"It is safe to say these garbage buckets are never scalded or otherwise sterilized. All summer long portions of putrid vegetable matter in these receptacles, exposed to the hot rays of the sun, are covered with swarms of flies. Is it not a certainty that they must carry the typhoid germs from one bucket to another, till all are impregnated? These flies, with their feet covered with the germ-laden filth, visit every yard, daubing it over the grapes; enter every kitchen and dining room, trailing typhoid fever over all and every kind of food exposed. The wonder is not that we have so much typhoid, and that the alarm has been sounded by the doctors, but that every house has not its sick or its dead."

What is true of Indianapolis is true of Fort Wayne, except that conditions here are even more intolerable. In addition to the garbage abuse, careless property owners are allowed to clog the alleyways with manure piles, dead animals, broken bottles, cast-off clothing and all manner of refuse and filth. Protests to the health officer call forth no correction of a practice that is little short of criminal, and the city administration refuses to take cognizance of the health officer's dereliction. Fort Wayne is naturally a healthful city, but sooner or later, if sanitation continues to be neglected as it now is, disease will reap an awful harvest here.

In this connection it is worthy of note that Asiatic cholera has this year made its appearance in Europe. No doubt this season Germany will be the limit of its western march. But look out for next year and the year following. Less than fifty years ago, after its appearance in Europe, as it has appeared this summer, cholera crossed the waters and claimed thousands of victims in the United States. Its ravages were not confined to southern cities, either. No one can say that this time next year we shall not be contending with this dread plague right here in Fort Wayne. It certainly behooves us to fortify against such a calamity by enforcing the wise statutes and ordinances that have been enacted for our protection."

The above editorial, taken from the *Fort Wayne Daily News*, is timely. Considering the dirty condition of some of our streets, and the absolutely filthy condition of most of our alleys, it is surprising that there has been so little sickness and death in the city. We cannot, however, continue to ignore the conditions which breed disease and expect the present favorable health rate to remain unchanged. The necessity for more attention to the sanitary regulations of the city is imperative, and it is nothing short of an outrage that our city officers permit the present condition of affairs to exist. A. E. B., JR.

Our Efficient State Board of Health.

We have several times during the past few years had occasion to call attention to the very efficient work performed by the Indiana State Board of Health, which is under the direct influence of the very capable and enterprising secretary, Dr. J. N. Hurty. Instances are constantly arising which indicate that Dr. Hurty is a man who is alive to the responsibilities of his position, and will allow nothing to deter him from doing his duty as he sees it. He is particularly to be commended for his action in recommending that the State Soldiers' Home at Lafayette be temporarily abandoned because of its filthy and unsanitary condition as determined in the course of an investigation relative to the cause of typhoid fever in the institution. Dr. Hurty does not mince words in declaring in his report that the hospital has not been well kept, that it is unsanitary and unclean, that disease germs lurk in the woodwork, mattresses and floors, that the water closets should be entirely torn out and rebuilt, that the hog pens should be removed farther away from the buildings and that laxity has been shown in the diagnosis and care of cases and in the general management of the institution. In regard to the typhoid which has existed in the hospital for many months Dr. Hurty says that in whatever way the infection found entrance it certainly has been spread by uncleanness and not by polluted water or milk.

It is fortunate that we have at the head of the State Board of Health a man who is so fearless, positive in action, and possessed of unquestioned ability and a keen sense of duty. It is more than probable that the report of the investigation of the sanitary condition of the State institution at Lafayette will act injuriously to the interests of some who have had the institution in charge, and lead to unpleasant criticisms. But the conditions at Lafayette tell their own story, and Dr. Hurty will receive hearty approval of his course in exposing such a condition of affairs. As a matter of fact we believe that the sanitary conditions at all of the State institutions should be frequently investigated by the State Board of Health, and reports made as to their efficiency in promoting the welfare of the inmates. We are satisfied that if such investigations were carried out under the direction of Secretary Hurty, the people of the State would know the exact condition of affairs and how well those entrusted with the care of the institutions have performed their official duties.

A. E. B., JR.

Medical Articles in the Daily Papers.

Quite frequently the daily newspapers contain articles heralding to a long suffering public some new discovery (?) which is reported as a sure cure for this or that disease, and even sometimes offered to be a cure for many diseases. Sometimes these articles are published in the reading columns, supposedly as items of news gathered by the representatives of the press, while in other instances they are accepted by the publishers as advertising matter but appear without any distinguishing ear-marks to denote whether they are bona fide news items or paid advertisements. The medical advertiser is shrewd enough to know that if he can exploit his cure-all in a manner indicating that it has the endorsement of the publishers of the newspaper, or at least has been considered of sufficient importance to be given publicity as a news item, his returns will be much greater; and it is quite possible that the publisher, realizing such advantages to the advertiser, obtains a better price for the space occupied. It is, however, a species of deception which works harm to the public, and is profitable alone to the medical advertiser, and the publisher who caters to his demands. The medical article which contains information based upon the experience and findings of reputable and trustworthy physicians, and which from its very character is intended to be educational and not an exploitation of the reputed virtues of some medical man or his cure-all, serves a distinct and valuable service to the public, and its appearance in the public press should be encouraged. Recognition of this fact has led to a policy, recommended by the *Journal of the American Medical Association* and followed by many medical societies throughout the country, which consists in having authoritative information on various subjects relating to hygiene, sanitation and laws pertaining to the propagation and spread of disease, published under authority of medical societies, without bringing before the public the name of any individual or remedy in such a way as to in the slightest manner lead to the idea that the article or any portion of it is intended as an advertising feature either directly or indirectly. Occasionally an article is accepted from some medical man for publication in the daily press when it carries on the face of it the stamp of advertising though its appearance in the public press because of location, character of type, etc., would not so indicate. Intelligent and sensible people are not led astray by such an article, though the more ignorant and credulous may fall victims to the delusion, and particularly if any claims that are made have the slightest title to plausibility, and

a certain amount of skillful word jugglery has been employed in presenting them. It is the ridiculously absurd claim, put forth in language which stands out as convincing proof of the general ignorance of the advertiser, which fails to attract the attention of any but those who find amusement in reading it because of its peculiar or senseless literary construction and absurd logic. An instance in point is a signed article on "Phthisiophobia" which has recently appeared in the daily papers of Fort Wayne. The writer claims to "have discovered that a combination of calcium chloride and ozone will destroy the tubercule bacilli." For the treatment of consumption he has made "an air-tight cubicle" in which "the patient spends from three to four hours every day breathing the calcium chloride of ozone." He says, "the cavity in the lungs I obliterate with my diasclenic electricity." Some of the other statements in the article quoted exactly, spelling and all, are as follows: "By examining the sputum from time to time until the tubercule baccili is readated from the lungs and the internal administration of tonic to overcome the tox albumien and hastens metamorphici." * * * "The real causes of consumption spreading are in the tenement houses where these consumptives live and die and move out and others move in without being fumigated." With reference to tuberculin injections he has the following to say: "This theary in tubercular bovin have since died out and it was júst like a bubble on the water when it exploded there was nothing it it but wind." * * * "Each injection caused chills and fever, septicaemia, similia, similibus, cure-niti. Such a modus of oerandi was a disgrace to civilization." He finally concluded by saying "I cure my patients by physical diagnosis." After reading this humorous production one wonders if its publication was authorized by the editors as a supplement to the page devoted to comic sayings, or with a deeper motive which carried to its logical conclusion would indicate that the public deserves to know just how big an ignoramus the writer of the article is, and therefore how little confidence should be placed in him. But the fact remains that no article of this kind should be accepted for publication by any self-respecting editor, and the mercenary side of the proposition should not lead the editor to patch up the incongruities of thought and illiterate expression in order to make the article fit for publication. At present there is a tendency on the part of the editors and publishers of all high class periodicals to exclude from the pages of their periodicals medical advertising of every kind and to expose the fallacies of the quack doctors and patent medicine

manufacturers. We hope that the reform movement will be contagious and that eventually the editors and publishers of our daily papers will join in the righteous movement. It is not only in the interest of right and justice that such a policy should be pursued, but is demanded in the interests of the ignorant and credulous who are not capable of properly judging the true character of medical advertising of any kind which appears in the public press.

A. E. B., JR.

ORIGINAL ARTICLES

No paper published or to be published elsewhere as original will be accepted in this department.

*The Differential Diagnosis Between Typhoid and Tubercular Diseases.**

BY

J. S. BOYERS, M. D.
DECATUR, INDIANA.

Typhoid fever is an *acute* infectious disease, caused by the specific bacillus typhosis of Eberth. Tuberculosis is usually a *chronic*, though at times acute, and an infectious disease, caused by the vegetable parasite, the bacillus of tuberculosis.

Typhoid is characterized by hyperplasia and ulceration of the lymph-follicles of the intestines, swelling of the mesenteric glands and spleen, parenchymatous changes in other organs, and toxemia. It is also known by its gradual onset, peculiar temperature curve, rose-colored eruption, usual diarrhoea, tympanitis, abdominal tenderness, sero-reaction, and aliability to certain complications, such as intestinal hemorrhages, perforation, heart failure, pneumonia, etc. These symptoms, however, are by no means constant; even the temperature may not be characteristic, but may be normal, subnormal or intermittent.

The lesions of tuberculosis are characterized by nodes or diffuse growths infiltrating the tissues, while aggregations of the elementary tubercles give rise to large tubercular masses. These tubercles undergo caseation or sclerosis, followed in turn by ulceration, or, rarely, by calcification.

The site of tubercular infection may be anywhere in the body, but the distribution of the infection is very unequal. Tubercle bacilli

* Read before the Fort Wayne Medical Society, June 20, 1905.

are found in large numbers where the invasion is recent or where the infection is rapidly extending. They are very scanty in chronic affections, as in glandular scrofulosis and in lupus. In adults the lungs are the most frequent site of infection; in children, the lymph-glands, bones and joints. Osler found 275 cases with tubercular lesions out of 1000 autopsies, and with but two or three exceptions the lungs were affected in all. The distribution in other organs was as follows: Pericardium, 7; peritoneum, 36; brain, 31; spleen, 23; liver, 12; kidneys, 32; *Intestines*, 65, or over 23%; heart 4, and generative organs, 8.

The bacillus of typhoid has been found in the spleen in large numbers at autopsies in typhoid fever. Its presence may also be demonstrated in the intestinal lesions, the mesenteric and lymph glands, liver, bile, kidneys, the blood, the rose-colored spots, the vomit and the sweat. While typhoid may occur at any season of the year, yet it is most prevalent in the late summer and early fall, especially after hot and dry summers, much of the increase being due to dust in the atmosphere laden with typhoid germs.

Tuberculosis develops more rapidly in late winter and during spring months, owing to indoor life and over-crowded living apartments of the people, and an insufficiency of sunshine and pure, dry, out-door air.

Typhoid may occur at any age; it is, however, especially frequent among the young and robust, between the ages of 15 and 35 years. I have attended two cases, one male and one female, over 70 years of age, and a female child 30 months old, sick of typhoid fever, all of whom recovered.

Pulmonary tuberculosis is most common between 20 and 30 years of age, though it may occur at any period of life. Certain forms of tuberculosis are especially frequent in young children, as lymphangitis, mesenteric and meningeal.

Tuberculosis is worldwide in its distribution, and while typhoid is also widely distributed throughout all parts of the earth, yet it is especially prevalent in temperate climates.

Typhoid fever may simulate, under various conditions, many diseases, as: 1st, acute miliary tuberculosis; 2nd, pyæmia; 3rd, tubercular peritonitis; 4th, appendicitis; 5th, ulcerative endocarditis; 6th, right salpingitis; 7th, catarrhal enteritis; 8th lobar pneumonia; 9th, influenza; 10th, uræmia; 11th, trichinosis; 12th, typhus fever; 13th, relapsing fever; 14th, toxæmia; 15th, scarlet fever; 16th, yellow fever.

Tuberculosis may simulate typhoid fever, lobar pneumonia, cerebro spinal meningitis and some other diseases.

In the main, acute general miliary tuberculosis is *the* form of tuberculosis that simulates typhoid fever, but while there are many points of similarity between them yet it will be seen from the following comparison of characteristics they are not so much alike.

TYPHOID FEVER	TUBERCULOSIS
1-Epidemic and family predisposition.	1-Tuberculous family history.
2-Recent association with typhoid patients.	2-Previous history of typhoid not characteristic.
3-All or part of premonitory symptoms present.	3-Premonitory symptoms present.
4-Epistaxis common.	4-Epistaxis rare.
5-Fever curve continued and by regular gradations.	5-Fever curve irregular.
6-Pulse frequently dicrotic.	6-Pulse small and rapid and out of proportion to the fever and may be irregular.
7-Respiration moderately increased and sighing in severe attacks.	7-Respiration frequent and labored and jerky.
8-Face flushed but not dusky.	8-Face dusky, with peculiar pallor and frequently one or both cheeks having a crimson flush.
9-Eruption of flea-bite appearance coming and going over abdomen and chest.	9-No eruptions unless complicated with malarial fever.
10-Widal test valuable aid in diagnosis of typhoid.	10-Widal test absent.
11-Knee jerk always present.	11-Knee jerk may be absent.
12-Contents of punctures from spleen may show typhoid bacilli and these bacilli may be found in other organs and excretions of the body as stated above.	12-Tubercle bacilli rarely found in the blood.
13-Hemorrhage from bowels not uncommon.	13-Hemorrhage from bowels very exceptional.

14—Reaction from tuberculin test wanting.

15—Perforative peritonitis often present.

16—Diarrhœa frequently present.

17—Typhoid fever may run its course with a temperature about or even below normal.

In typhoid fever, tubercular germs are found only in complicated cases of infection by both the germs of typhoid and the tubercular bacilli.

Most usually when the typhoid condition is established, muttering delirium, dry brown tongue, sordes on teeth and in mouth, fibrillary and tendonous twitching, and congestion of a part of one or both lungs are present.

These late typhoid symptoms are absent in the main, in any stage of tuberculosis.

14—Tuberculin test fairly reliable in diagnosis of tuberculosis.

15—Perforative peritonitis rare.

16—Usually constipated.

17—Temperature usually above normal, prolonged and characteristic in *tuberculosis*.

It is well to keep in mind that as Butler says: Acute miliary tuberculosis results in many cases from the rupture into a vein of a tuberculous nodule, after which the bacilli are carried by the blood stream to various organs of the body. "Whatever its origin, the condition is usually at first an acute generalized infection and may remain so; but later in its course the infection may be predominantly localized, either in the meninges (most common) or the lungs; or it may be thus localized from the onset." Thus a general or typhoid form may result.

Notwithstanding all these symptoms more or less clearly before us, it may be extremely difficult and impossible at the very time to say whether the case at hand is typhoid fever or acute miliary tuberculosis, and a little time must elapse to clear away doubts. I remember I saw Dr. J. M. DaCosta recommend a delay of twenty-four hours in the diagnosis of a difficult case in the Pennsylvania Hospital when I was a student at Jefferson Medical College in Philadelphia.

About 19 years ago I was called in haste to see another doctor's patient, a man near 40 years of age, who had been treated for pulmonary tuberculosis for about two weeks. He was advised by his physician to take all the exercise he could bear. About half an hour before I saw him he had dressed himself and was walking from one room into another, when he suddenly fell from exhaustion, perfora-

tion of the bowel having taken place through a typhoid ulcer and he passed away in a few hours.

Butler says:—"Aside from the symptoms and physical signs of the various forms of tuberculosis, the diagnosis depends: (1) Upon the presence of the tubercle bacilli in sputum, effusions, urine, pus or scrapings from the lesions; or upon the results of inoculation of these substances into guinea-pigs. A reaction after the hypodermic injection of tuberculin (Koch's original). One milligramme is used as the initial dose, but if there is no reaction, i. e., unless the temperature rises within ten or twelve hours to 102° to 104° —a dose of two or three milligrammes is given two or three days subsequently."

As to the Diazo reaction of Eberlich, Butler says, according to Simon: "This reaction may be found at times in pneumonia, scarlet fever, measles, variola, malaria, septic conditions, and advanced malignant disease.

There are two diseases, however, in which the occurrence of the diazo reaction is of much clinical importance—in one for diagnosis, in the other with reference to prognosis."

"The first is *typhoid fever*. If in a doubtful case the reaction is found between the fifth and thirteenth day of the disease and no later than the twenty-second day, it is presumptive evidence that the disease is typhoid fever."

"The second disease is *tuberculosis*. In the acute miliary form, which is liable to be confounded with typhoid fever, the reaction generally does not appear until the beginning of the third week and continues to be found almost to the end. In pulmonary phthisis a persistent diazo-reaction is almost invariably indicative of a rapidly advancing and usually incurable condition."

REFERENCES:

1. Diagnostics of Internal Medicine, Butler.
2. Practice of Medicine, Osler.
3. Practice of Medicine, Anders.
4. Clinical Diagnosis, Simons.
5. Pathological Technique, Mallory & Wright.

Warming a laryngeal mirror prevents condensation of the breath upon it only for a short time. The mirror will remain bright, however, throughout a prolonged examination if, instead of warming it, its surface is smeared with an invisible film of soap.—*American Journal of Surgery*.

SOCIETY PROCEEDINGS

Fort Wayne Medical Society.

Meeting of May 12, 1905.

Society called to order in the Assembly Room by President Drayer, with thirty-five members and about one hundred visitors present.

Dr. Christian R. Holmes, of Cincinnati, Ohio, delivered the address of the evening, his subject being "*Studies of Modern Hospitals.*" Doctor Holmes first gave a thirty-minute talk on the ideal hospital, and followed it with a series of stereopticon views illustrative of the physical principles of ventilation, location and construction, and plans and pictures of the best hospitals in the world, secured by him in his extensive travels. The necessity of plenty of sunlight and fresh air, amplitude of space and proper methods of construction and location to secure them formed the chief burden of his address. Proper buildings and adequate maintenance, correct nursing, scientific baths, protection from fire, and, all in all, buildings constructed in conformity with the most approved sanitary methods, were all fully dwelt upon in a manner at once instructive to the physician and nurse and interesting to the lay hearer. Doctor Holmes showed interior and exterior views of the great hospitals of Hamburg, Paris, Rome and other European cities, and others showing the construction and arrangement of the larger hospitals of this country, pointing out the advantages and the failures of each. He described the plans for Cincinnati's municipal hospital, and spoke of the advantage of municipally supported institutions of the kind.

At the conclusion of Doctor Holmes' address a rising vote of thanks was extended by the Society.

Adjourned.

J. C. WALLACE, Sec'y.

Meeting of May 23, 1905.

Society called to order by President Drayer with thirty members and guests present. Minutes of two previous meetings read and approved.

CLINICAL CASES. CASE 1. *The Value of Protecting Glasses to Mechanics* was well illustrated by the exhibition of a pair of dark smoked glasses, shown by Doctor Wheelock, the surface of the lenses

of which had been cut or scratched in a very large number of places by flying pieces of metal while the owner of the glasses had been wearing them at his accustomed work. The appearance of the glasses indicated what would have happened to the surface of the cornea of the eye had the glasses not been worn.

CASE 2. *A Case of Foreign Body in the Ear Presenting Difficulties in the Removal*, was reported by Doctor Havice. A pebble had been shot into the ear with a sling shot and become imbedded behind the drum membrane, causing considerable pain, hemorrhage and impairment of hearing. Because of the peculiar shape of the pebble and its firm lodgment, considerable difficulty was encountered in its removal, which was done under a general anaesthetic. An improvised hook was required to extract the foreign body, but the removal necessarily caused some further tearing of the drum membrane.

PAPERS:—No. 1. *Differential Diagnosis of Appendicitis* was the title of a paper by Dr. G. L. Greenawalt, in which the essayist said that all cases of appendicitis were not easy of diagnosis, and that mistakes had frequently been made by many experienced men. The well recognized manifestations of appendicitis, including pain, tenderness and rigidity, served to indicate the probable nature of the trouble, but occasionally even these symptoms are misleading. Much may be placed upon the history of the case, and in case of doubt an exploratory operation is much better than a waiting policy that may end disastrously.

In discussing the paper, Dr. B. Van Sweringen said that it had been his observation that in a large number of cases there are always a small proportion in which difficulties arise in making a satisfactory diagnosis. It is not so difficult to say that peritonitis exists, but it may be difficult to determine the cause. The nervous makeup of a patient may lead to confusion in estimating the value of the symptoms. Some are hard to get a history from, and there are others in which it is hard to draw conclusions from palpation.

Doctor Drayer said that he knew it was not always possible to make a correct diagnosis of appendicitis, and in this connection reported a case seen by three competent surgeons, in which there was a question as to the nature of the trouble. The patient had passed from the bladder mucus plugs, the size of the ureter, on three occasions, and had but few of the classical symptoms of appendicitis. On operation appendicitis obliterans was discovered. The patient made a complete recovery, and there has been no recurrence of the mucus plugs.

Doctor Havice said that he had seen a case operated in which a diagnosis of appendicitis was made, but that when the belly was opened the patient was found to be pregnant. The appendix was not removed. In this connection he asked if hysteria could not simulate appendicitis.

Doctor McOscar said that he had recently seen an hysterical patient develop appendicitis. The pain developed as a result of suggestion. In these cases it is well to remember that the pain depends upon the location of the morbid process. In appendicitis there is always severe pain before the onset of the fever.

Doctor Bulson said that he had known of one or two cases of hysteria that had been operated for appendicitis. He said he thought hysteria ought to be diagnosed, as it is a disease with distinct earmarks which make its recognition possible. A hysterical patient may give manifestations and symptoms simulating appendicitis without really having appendicitis.

Doctor C. E. Barnett said that oophoritis not infrequently causes hysteria in the female, and this may be mistaken for appendicitis.

Doctor Weaver spoke of the pain referred to the appendix region on account of a distended colon.

Doctor Porter said that a hysterical woman may have appendicitis but that it was not always possible to definitely decide whether appendicitis existed in such cases or not. Usually in these cases the hyperalgesia is brought out on the slightest touch, though this condition is also present when there is increased tension. It disappears on perforation and gangrene, and if it was present and then disappears it indicates either gangrene or perforation if the other symptoms correspond. One of the typical symptoms of invagination is its suddenness. Doctor Porter said that he had never seen an appendix that gave rise to pain that did not have a macroscopic lesion.

No. 2. *The Diagnosis and Treatment of Osteomyelitis* was the subject of a paper by Dr. Miles F. Porter. He said that the disease is usually an expression of a dyscrasia, and is frequently met with in patients suffering from tuberculosis and syphilis. The active causes may be a trauma which sets up a typical acute osteitis, and if the tissues are favorable to its development, not only the compact substance but the medulla and cancellous tissues become rapidly filled with pus, producing an extensive necrosis. Suppuration is more apt to occur in osteitis affecting the spongy bones, as those of the tarsus and carpus, the terminations of the long bones, and the bodies of the vertebræ. The disease is characterized by pain at the seat of

the inflammation, before any tumefaction is recognized. The severity of the pain is according to the extent and activity of the morbid process. It is decidedly increased on pressure and is usually more severe at night. The disease may be ushered in with or without a chill and is followed by exacerbations of temperature. Septic absorption frequently becomes a prominent and dangerous symptom. Treatment is essentially operative and consists in removal of the necrosed tissue and free drainage.

No. 3. "*Osteomyelitis of the Temporal Bone*" was the title of a paper read by Dr. Albert E. Bulson, Jr., in which he said that osteomyelitis of the temporal bone was like osteomyelitis in any other bone structures of the body. It virtually begins as a periostitis, rapidly increasing to an otitis, and as a result of the infective process the condition ends in more or less extensive necrosis. The condition may progress rapidly or slowly, depending upon the character of the infection as also the resistance of the tissues to invasion. The symptoms are much the same as the symptoms of the same disease when located in other portions of the body, and are characterized by pain of a boring variety which becomes more aggravated at night, and is intensified by pressure. As the disease in probably ninety-nine cases out of a hundred originates as a result of extension of infection from the middle ear cavity, the seat of greatest intensity will be immediately over the antrum, though it may and frequently does involve the entire mastoid structure, even to the tip of the process. In reasonably acute cases there is usually much tumefaction of tissues over the mastoid, and a considerable rise in temperature. In the slowly progressing cases there may be temperature due to the toxæmia, and a dull pain, especially at night, and tenderness, but otherwise no marked symptoms of marked inflammation. Treatment is surgical first, last and all the time, and consists in removing all of the diseased tissue by proper surgical methods, and providing for satisfactory drainage.

In the discussion of the two papers on osteomyelitis Dr. Wheelock said that generally speaking he did not believe that there was such a thing as osteomyelitis of the temporal bone, for the reason that technically the disease is confined to those bones which have a medullary cavity. Eighty per cent. of the mastoids are pneumatic, and the infection of the mastoid cells occurs through extension from the middle ear. He quite agreed with the treatment advocated for this class of cases and deprecated delay in operative attention.

Dr. C. E. Barnett spoke on the after-treatment of these cases, and

recommended the use of decalcified bone chips in filling the cavity made by removing the necrosed tissue.

Doctor Bruggeman said that the majority of cases should be opened and drained early, much as we treat a phlegmon of the thigh. The tenderness is not usually elicited in the early stages.

Doctor Morgan said that occasionally these cases cure themselves by throwing off the necrotic tissue, and covering the diseased area with new formed bony tissue. Five years ago he saw a girl who had two bone openings, through one of which a piece of necrosed bone had discharged. Without operative attention the girl finally became better, though the limb is undeveloped and the patient is still on crutches.

Doctor Porter in closing said that in these cases we should remove all of the diseased tissue for the same reason that we remove a diseased appendix. It is an infected area, which will extend, and systemic disturbance must be expected unless the disease has been thoroughly eradicated. In cases operated late the parts should be absolutely fixed and elevated in order to give rest and comfort, and to prevent fracture.

Doctor Bulson in closing said the term osteomyelitis was one that had become flexible, and had been applied by several authors of late text-books on the ear in describing an otitis of the temporal bone which involved all of the pneumatic and cancellous structures, and was accompanied by invasion of pus into the cellular structure of the bone, terminating in necrosis.

The following amendment to Section 3, Chapter 5, of the By-Laws was presented by Doctor Wheelock: "A sum not to exceed fifty cents per annum shall be collected at the first meeting in June each year from each member of this Society for the purpose of creating a sick benefit fund. This fund shall be invested in a building and loan or savings association at the current rate of interest. It shall be used for the relief of sick members of the Society who are in need, and it may be drawn upon for no other purpose. The fund shall be placed to the credit of the Fort Wayne Medical Society by the Secretary, and the regular officers of the Society shall act as the trustees for such fund."

A motion was also made to amend Section 2, Chapter 2, as follows: "Regular meetings shall be held every Tuesday evening, and each alternate meeting shall be set apart for the presentation of clinical cases, beginning with the first Tuesday evening in January, excepting

during the months of July and August, and such other times as in the judgment of the Society may seem warranted."

On motion Doctors Culp and Devoe were elected to membership.

A motion was made by Doctor Porter that a committee be appointed to draft resolutions of condolence on the death of Mrs. W. H. Myers, wife of Doctor Myers, a member of the Society. The chair appointed Doctors Porter, H. V. Sweringen and Bulson.

Adjourned.

ALFRED KANE, Sec'y. pro tem.

Meeting of June 6, 1905.

Meeting called to order by President Drayer with fifteen members present. Minutes of previous meeting read and approved.

CLINICAL CASES. No. 1. *Alopecia of Both Eyebrows and Eyelashes*. This case was reported by Doctor Havice for diagnosis. Patient had always had heavy eyebrows and eye-lashes and been in good health. Recently the eye-lashes and eye-brows began to come out in spots, leaving a perfectly bald surface. There has been no loss of hair on the head. The bald spots occasioned by the loss of the eye-brows and eyelashes do not seem to be the seat of any active inflammatory trouble.

In the discussion of the case it seemed to be the consensus of opinion of those present that the trouble was alopecia.

CASE 2. A case of *Eclampsia With Recovery of the Patient* was reported by Doctor English. The patient had the first convulsion two weeks prior to the time of expected labor, and had three convulsions just prior to the delivery, and one following the delivery. The child was alive after the first convulsion, but evidently died during the second or third convulsion, as it was delivered dead. Patient suffered from acute nephritis for ten days and finally made a complete recovery.

In discussing this case Doctor Beavers said he believed that in eclampsia bleeding should be resorted to at once. The bleeding should be copious and rapid. He said he also believed in immediate delivery of the child.

Doctor Drayer said that in the maternity hospitals of New York the mortality in eclamptic cases had been frightful, no matter what the treatment. He said that he had treated cases in a variety of ways, and that he found that one way was about as good as another. In one of his cases the patient had an eclamptic seizure forty-eight

hours after delivery, and died during the seizure. She had had no eclampsia before delivery.

Doctor Brueggeman said, on the theory of the production of eclampsia, "it is the result of toxins produced in the blood." He said he did not believe in injections of normal salt solution as it caused the blood pressure to rise, and favored the production of other attacks.

Doctor English in closing the discussion said that he would not again give veratrum until after delivery, but would give chloroform until delivery in order to keep the seizures under control. He also said that he did not believe he would again bleed unless the patient was very plethoric. He said that he had had seven cases and had lost no mothers but had lost the child in nearly every instance.

PAPERS. No. 1. "*Modification of Milk in Infant Feeding*" was the title of a paper by Dr. L. P. Drayer. (This paper appeared in full in the August number of the *Journal-Magazine*.)

No. 2. "*The Treatment of Summer Diarrhæas in Infants*" was the title of a paper by Dr. S. D. Beavers. He said that the first consideration in the treatment of any disease should be prophylaxis. So in the treatment of summer diarrhæas in infants the first thing to consider is the feeding. Second in importance is the care of the infant as regards its clothing, toilet, environments, etc. With the beginning of a diarrhœa in an infant the milk should be stopped and a simple cathartic, as castor oil or calomel, given. The baby should be kept from twelve to twenty-four hours without milk, and given sterilized water to quench thirst. In severe cases the rectum should be washed out with enemas, and if possible some water should be left in the rectum in the hope of replenishing some of the watery fluid that has been passed from the system by the watery diarrhœa. In extreme cases it is not only necessary but advisable to use subcutaneous injections of normal salt solutions. He has seen two cases saved by this method. The baby should be kept clean, and frequent sponging with tepid water does much to make the patient comfortable. Medicine to lower the temperature should not be given, as a toxæmia has already lowered the vital forces, and the febrifuge greatly increases the chance of collapse and death. Internal medicines are indicated only in those cases which develop on the basis of a dyspeptic catarrhal or follicular enteritis. As irrigation only empties the lower bowel, the small bowel should be cleaned by a purgative such as castor oil. Salol is a good intestinal antiseptic, and subnitrate of bismuth or chalk has a soothing effect on the in-


flammed bowel. The period of convalescence should be carefully guarded.

No. 3. "*Treatment of Chronic Constipation in the Infant*" was the title of a paper by Dr. Alfred Kane. (This paper appeared in full in the August number of the *Journal-Magazine*.)

In discussing these three papers Dr. English said that he believed that, generally speaking, too many drugs are given to infants. In his opinion the proper treatment of many infantile diseases consists in a proper regulation of the food. He has had some infants do very well on modified cow's milk when the mother's milk seemed to disagree. He has also had some success in using whey in infant feeding.

Doctor Weaver said that an examination of the stools is of great benefit in determining the condition of the bowels of the infant, and how well the food is being taken care of. There are certain cases in which there is supposed to be a lack of fat in the food, when in reality there is an inability on the part of the intestinal canal to absorb fat.

Doctor Barnett said that much of the disease in infants is due to the fact that many women are shirking their maternal duty. Too many women object to nursing their babies, and the infants of such mothers are at a very early age placed upon artificial food which has been poorly selected and poorly prepared. Too few women realize what it means to have the baby's food sterile. In his judgment castor oil is the best household remedy.

In closing, Doctor Drayer said that whey is a most excellent food for babies, but it is usually difficult to get the babies to take it. When they do take it they retain it and do fairly well on it. It ought to be sweet whey. In the majority of cases of summer complaint the babies die in the first twenty-four hours from shock as a result of volvulus or intussusception. He said that he believed that as a result of considerable agitation on the subject that women are at present nursing their babies more than was the custom some time back. 

Doctor Beavers in closing said that opium was a very much abused drug in the treatment of diarrhœa. In the summer diarrhœas in infants it is more often harmful than beneficial.

The following resolution by Doctor Wheelock was read, and on motion laid on the table until the next meeting:

Whereas, the statistics of 1903 showed that 466 deaths and 3983 serious injuries from the use of explosives followed the celebration of the Fourth of July in the United States, and; Whereas, in 1904 the number of deaths amounted to 183 and the number of injured was 3986, be it therefore

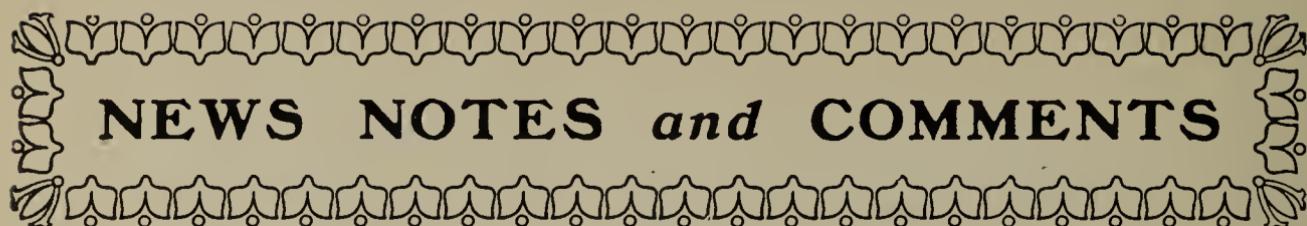
Resolved, that the Fort Wayne Medical Society requests the daily press to enter upon a campaign of education by publishing the statistical facts and urging upon the community the dangers of the use of explosives of all kinds and especially such as contain metal in the form of blank cartridges; and be it further resolved, that this society requests the city and county authorities to enforce any and all city ordinances and state laws bearing upon the use of explosives on the day in question.

Adjourned.

J. C. WALLACE, Sec'y.

A scroll-saw, with an assortment of a dozen saws, can be purchased at the hardware store for twenty-five cents; it is ideal for resection of the small bones of the hand and foot, for amputation of the digits, etc. Well tempered carpenter's chisels and gouges, and a carpenter's wooden mallet answer the purpose admirably for bone work. A useful bone drill can also be selected from the stock of the hardware dealer. A gardener's pruning knife and a carpenter's miter saw are the best tools for the removal of plaster dressings. A cheap potato knife, rough sharpened on a stone, is excellent for cutting through starch bandages. Crochet needles are most useful for lifting buried stitches out of a sinus.

Knitting needles find another purpose as a means of rupturing the membranes when this is needed in obstetrical work. Sharp and blunt retractors may be fashioned, in an emergency, by bending the tines of a fork and the handle of a spoon, respectively. A teaspoon is also useful as an elevator of the eye, when resection of the superior maxilla is performed. An inverted tea-strainer is useful in the dressing after colostomy, to prevent pressure of the gauze upon the gut. A spoon-shaped potato cutter may be used, in an emergency, as a wound curette. Similarly, applicators, probes and depressors may be improvised by twisting stout copper wire. The multiple surgical uses of the hairpin are also well-known. Of stouter material, if necessary, a small self-retaining speculum can be quickly made from steel wire; it often obviates the need of an assistant when searching the hand or foot for a foreign body.—*American Journal of Surgery*.



NEWS NOTES *and* COMMENTS

International Medical Congress.

I am pleased to announce that final arrangements have been perfected for the tour of the American party to the International Medical Congress at Lisbon, April, 1906.

The party will sail on Saturday, April 7, on the North German Lloyd steamer "Koenig Albert" for Gibralter, visiting Algerciras, Seville, Cordova, etc., spend a week in Lisbon during the Congress and returning to New York on Wednesday, May 9. This trip may be made comfortably in a first-class steamer both ways, all expenses paid, including board and lodging while in Lisbon, and entertainment at other points, for \$300.00.

A number of side trips are being added and ticket will be good returning through Europe if desired at a slightly increased cost.

Following is a list of those who have joined the party:

Lewis S. McMurtry, M. D., Louisville.

Nicholas Senn, M. D., Chicago.

J. D. Griffith, M. D., Kansas City, Mo.

W. F. Southard, M. D., San Francisco.

Frank P. Norbury, M. D., Jacksonville, Ill.

W. T. Corlett, M. D., Cleveland, O.

C. H. Hughes, M. D., St. Louis, Mo.

R. T. Morris, M. D., New York City.

A. Vander Veer, M. D., Albany, N. Y.

Jos. M. Mathews, M. D., Louisville.

J. B. Murphy, M. D., Chicago.

Fenton B. Turck, Chicago.

Jas. E. Moore, M. D., Minneapolis, Minn.

Ramon Guiteras, New York City.

Dr. John H. Musser (Philadelphia) is chairman of the National American Committee, and Dr. Ramon Guiteras (75 West 55th street, New York City) is the secretary, to whom all applications for membership and communications in regard to the presentation of papers should be addressed.

All those who contemplate the trip are cordially urged to make reservation with the writer at once in order to secure desirable berth on the steamer and good hotel accommodations. Program of the itinerary upon request. CHAS. WOOD FASSETT, St. Joseph, Mo.

MEDICAL **REVIEWS**

Department of Medicine and Therapeutics

In Charge of **George W. McCaskey, A. M., M. D.**

Professor of Clinical Medicine in the Fort Wayne College of Medicine, Ft. Wayne, Ind.

Cephalic Tetanus.

J. H. Lloyd, Philadelphia (*Journal A. M. A.*, October 7), reports a case of this rather rare variety of tetanus, in which, contrary to the usual rule, the facial paralysis was bilateral. As in all other recorded cases of this kind, except one, the original inoculation wound was on the bridge of the nose. He reviews the chief facts of note in cephalic tetanus, and recapitulates briefly the other cases, seven in all, of facial diplegia in head tetanus that he has found in the literature. The peculiar fact that the same infection causes paralysis of some nerve while inducing tetanic spasm in others, is remarked, but can not be very well explained. Autopsy results, he states, are so far negative. The prognosis of head tetanus is a little better than in the usual type, but it is a grave disease with a very high mortality. Lloyd's patient came within the "chronic" group, the symptoms only appearing on the fourteenth day after the injury, and she made a good recovery. The peculiarities of the case, it being the seventh or eighth thus far reported with diplegia, render it of special interest.

Some Notes On Typhoid Fever in the Philippines.

William Duffield Bell declares that typhoid fever can be stamped out in the Philippines as well as cholera, and the endemic spots that dot the islands, and from which the poison emanates, can be readily eliminated. But the work must be done by intelligent white men, as the natives are entirely untrustworthy. The climate of the islands is not the main factor in the occurrence of the disease, but the carelessness and ignorance of the natives. Their food is insufficient, and the cool weather of the cold season, although slight to a foreigner, weakens the body of the native and renders him an easy prey to the typhoid fever germ, which the absolute lack of sanitation renders ever present. There are no sewers, excreta are deposited anywhere, often near the wells or streams used for drinking-water, and mussels growing in sewage are a frequent source of animal food to the craving native. Milk is rare in the islands, and hence

the disease is rarely spread by its use. White troops who use only boiled water for drinking and washing dishes are free from the disease when it is rife among the natives in the same locality. The type of the fever is similar to that in the United States, but the mucous membranes are always congested and hemorrhages are frequent from the nose, as well as from the bowels. The treatment consists of absolute rest and substitutes for the milk diet.—*Medical Record*, September 30, 1905.

The Stomach in Pulmonary Tuberculosis and the Effect of Gastric Juice on the Bacillus Tuberculosis.

E. Palier has studied the gastric conditions present in a number of cases of pulmonary tuberculosis, most of the patients being men between the ages of 22 and 45. He describes several of these, and says that his observations lead him to believe that in about 60 per cent. of the cases of incipient consumption there is hyperchlorhydria, in 20 per cent. the stomach is about normal, and in about 20 per cent. there is hypochlorhydria. The diet must therefore vary in different cases of the disease, and it is necessary to study the condition of the patient's stomach before it is possible to lay down rules for his nutrition. The stomach tube is not likely to do harm if carefully used. The effect of gastric juice in the tubercle bacilli in the sputum swallowed was also investigated. It appears that the normal gastric juice is bacteriolytic to the tubercle bacilli, but *in vitro* the process is very slow. The author believes, however, that in the stomach it is much more active, so that ordinarily no bacilli can pass the normal stomach and reach the intestine in virulent condition. In hypochlorhydria they undoubtedly can, and also under any conditions on repeated ingestion some may find opportunities to slip through and cause disease. The frequency of hyperchlorhydria and hypersecretion in pulmonary tuberculosis, the author believes, explains the frequency of gastric ulcer in this disease.—*Medical Record*, November 11, 1905.

Respiratory Movements of the Bronchial Tubes.

Dr. E. Fletcher Ingals, in the *Journal A. M. A.*, Oct. 28, 1905, contributes a very interesting article on the above subject in which he sets forth facts not widely known, or, at most, not fully recognized by the medical profession. His attention was called to the subject by doing a bronchoscopy on a child two years of age during which he observed the rhythmical dilation and contraction of the main

bronchi and their branches during inspiration and expiration. "This movement was so great that in inspiration the diameter of the tube was more than twice as great as in expiration." He had failed to observe the same movement in the bronchi of adults, but found it well marked in a boy thirteen years of age.

Experiments on two dogs confirmed the clinical observation, and in one of the dogs the ratio of the diameters was as great as one to five between expiration and inspiration. Direct stimulation of the peripheral end of the cut vagus produced marked contraction of the bronchial tubes. He concludes this most interesting contribution with some conclusions previously published by Dixon and Brodie.

1. The inhalation of ether or chloroform for anesthetic purposes abolishes the effect of the vagus on the bronchioles. This is due to the paralysis of the nerve endings by direct absorption through the mucous membranes.

2. Reflex bronchiolar constriction is best obtained by exciting the nasal mucous membrane. Little or no result has been obtained by stimulating the sciatic, central end of the vagus, superior laryngeal or cornea.

3. Gradual constriction of bronchioles followed by dilatation is usually seen postmortem.

4. Muscarin, pilocarpin and physostigmin excite the vagal endings and induce typical bronchiolar constriction, the effect of which is abolished by atropin.

5. Barium, veratrin, bromin and the salts of many of the heavy metals (e. g., gold) produce constriction, which is not influenced by atropin.

These facts are suggestive in the therapeutics of many cases in which expectoration is difficult.

6. Inhalation of CO leads to constriction of the bronchioles which is not altogether central in origin.

7. Chloroform, ether, urethane, lobelia and atropin induce dilatation of the bronchioles when constriction is present. The dilatation produced by lobelia is very transient, while that by atropin is permanent.

These facts should aid us materially in relieving spasmodic asthma.

***On the Importance of Differentiation in the Use of
Electric Modalities.***

A. D. Rockwell says that if there is any one thing more than another that has retarded, still retards, and will continue to retard the

all-round and scientific development of electricity in medicine, it is the increasing tendency to neglect the subject of differentiation in the selection of the various electric modalities. Neglect is but another name for ignorance of the subject neglected, and ignorance leads not only to unsatisfactory therapeutic results, but in the case of so potent an agent as electricity, to damaging results that may be more than transient. In illustration, he describes an instance in which the application of a high-tension current by the bipolar method for the relief of pelvic pain gave rise to results the opposite of what was intended and threatened legal proceedings on the part of the patient's friends, owing to lack of skill in controlling the current. In this way instead of a current of great tension but negligible magnitude the patient received one of less tension but appreciable magnitude, which under the circumstances in question occasions a shock associated with acute pain and rigid contractions. The author further speaks of the deep-seated nutritional effect of the high frequency current of lower tension and frequency but with greater magnitude, and he mentions the improvement obtained in two cases of pseudohypertrophic muscular paralysis treated with high-frequency currents of magnitude, by the administration of the spark itself by the direct bipolar method. He concludes by pointing out the superiority of the continuous current of magnitude (galvanic current) over all other manifestations of electricity for the relief of inflammatory exudates, and emphasizes the necessity for care in making use of the method of combined electrization with direct and to and fro currents.—*Medical Record*, October 7, 1905.

Treatment of Chronic Constipation.

Lane (*Brit. Med. Jour.*, J. A. M. A.) discusses particularly the conditions consequent on an imperfect evacuation of the large bowel. In the majority of cases this is associated with the symptoms popularly comprehended under the term constipation, but in a small proportion, while the large bowel up to the hepatic flexure or even to the splenic flexure may be constantly or frequently loaded, yet the patient obtains from the overflow a daily movement which is usually solid, and, consequently, makes no complaint of constipation. The large intestine, whose vitality has been depreciated, both by local inflammatory changes and by the general loss of tone, is thereby rendered liable to some specific infection, and ulcerative, membranous or other forms of colitis may develop in consequence. The condition frequently dates from a very early period, when,

owing to the unsuitable feeding of the child, the intestines, and particularly the large bowel, are distended with gas, rendering the whole of the abdomen abnormally prominent. The cecum and ascending colon appear to suffer most severely, owing to the fact that this portion of the bowel is hung up at the hepatic flexure, which is rendered more acute by the distension and consequent elongation of the transverse colon in a downward direction. This distension, by dragging on the band which supports the splenic flexure, renders it difficult for the contents of the transverse colon to pass into the descending colon. In consequence of this distension, the large bowel becomes more or less inflamed, and this inflammation may be sufficient to produce distinct peritonitis, as manifested by effusion. The inflammation of the cecum and ascending colon produces an adhesive process between the outer wall of the bowel and the peritoneum. These adhesions help to support the increasing weight of this portion of the bowel and to some extent to oppose its distension and downward displacement. Precisely similar displacements take place at the splenic flexure. After a time these adhesions develop into distinct mesenteries and strong bands. The bowel is less able to perform its functions; the intestine finally becomes bound down; the sigmoid is so contracted up that it ceases to be a loop and forms a straight conduit, the presence of the inflamed bowel in the true pelvis interferes with the functions of the ovary and fallopian tube, and in this way constipation would appear to play an important part in the sterility so common among women. The stomach function is finally interfered with and the kidneys become mobile. The treatment is purely operative.

Nitrous oxide narcosis can, in most cases, be continued "smoothly," with no cyanosis and with fair degree of relaxation, even for an hour. A laparotomy may be thus performed, if ether and chloroform are contraindicated. To secure such a narcosis it is best to use an apparatus that permits exhalation into the gas bag, and which has a valve for the admission of air. The bag should not be distended fully. After brief air and gas administration, air is turned off and the patient breathes $N(2)O$ and his own $CO(2)$. At short intervals, and whenever there is any cyanosis, a single breath of pure air is allowed.—*American Journal of Surgery*.

DEPARTMENT OF SURGERY GYNAECOLOGY *and* OBSTETRICS

In Charge of Miles F. Porter, A. M., M. D.
Professor of Surgery and Gynæcology in the Fort Wayne College of Medicine,

*The Status Lymphaticus and the Ductless Glands.**

BY

ROSWELL PARK, M. D., LL. D.
Professor of Surgery at the University,
BUFFALO, NEW YORK.

(*Author's Abstract.*)

The writer defined the term status lymphaticus and stated that the reason for bringing the subject before a body of surgeons was because the condition itself had so much to do with the question of toleration of anesthetics, and the matter of repair of wounds, that it really was one of exceeding importance. Not a few cases of sudden death during and after operation were to be explained by the abnormalities constituting this condition. These have usually been attributed to the anesthetic or the anesthetist, and it may be that had the latter appreciated all the dangers offered by the condition he would have guarded his anesthetic better or perhaps abstained from giving it. Nevertheless, the anesthetiser is not always to blame, because he is frequently called in without previous knowledge of the case, it being really the function of the medical attendant to carefully study it and determine its peculiarities.

The relation which the lymphatic system and the lymph-making organs bear to each other and to the ductless glands is as positive as it is obscure. Lymphoid tissue throughout the body seems to increase as the thymus normally disappears. In infantile marasmus the thymus has usually completely and prematurely disappeared, its condition being a fair index as to general nutrition. But it is hypertrophy rather than atrophy of the thymus which most interests the surgeon, since those individuals who die suddenly and unexpectedly usually have an enlarged thymus. There certainly exist strange relationships between the pituitary body, the thymus, the thyroid, the coccygeal body (to which too little attention has been paid), the testes, the ovaries, and perhaps the bone marrow. In this list the quite recent researches relative to the parathyroids should also be included. Indeed, a clearer recognition of the function of

* Read at the annual meeting of the American Surgical Association, San Francisco, Cal., July 5, 1905.

the latter seems to have changed the whole aspect in which we should regard Graves's disease, it being made quite probable that this condition is due rather to atrophy of the parathyroids than to excess of the thyroid or its secretion. In the ordinary forms of cystic goiter, where thyroid secretion is not augmented, the symptoms of Graves's disease are lacking. It is usually after removal of the thyroid proper that the opposite symptoms of Graves's disease thymus or pituitary extract should be administered internally, as well as the glycerophosphates or some similar upbuilding tonic. If now it should be necessary to clear out the nasopharynx, in such a case, the parts should be first desensitised by cocaine, to which a little adrenalin may be added, even previous to commencing anesthesia. If the patient be known to be subject to glottic spasm one should be prepared to do a tracheotomy on an instant's notice, and especially so if the thymus be perceptibly enlarged; one might even have to use a long trachea tube. Operations of convenience, then, should be postponed until the patients can be carefully built up; operations of necessity may be practiced with the above precautions, while in cases of impending or actual emergency one may depend upon artificial respiration—after tracheotomy, and the use of adrenalin.

510 Delaware Avenue.

(Owing to the extreme practical importance of the subject and because of the author's concise presentation of it the above is reproduced entire from the *Buffalo Med. Journal* of Aug., 1905).—ED.

A Plea for Local Anesthesia in the Radical Cure of Inguinal Hernia, Based on a Study of 300 Cases.

John A Bodine has operated on 284 patients, with 300 hernias, under local anesthesia, without a death or a suppurating wound. By means of Schleich's infiltration the amount of cocaine is reduced to a minimum and limited to a small area, producing acute local anemia, effectually retaining the fluid in one spot. Cocainization of a sensory nerve trunk, abolishing pain sensation in the region supplied by it, renders it possible to operate for hernia by its use. The operative area is superficial, and the region restricted by the anatomy of the parts. In strangulated hernia local anesthesia does not increase the shock, while general anesthesia is often too great a load to be borne. The local anesthetic permits of the application of hot towels to a possibly gangrenous intestine for some time, in order to determine whether it will react. The operation does not give rise to the danger of injury to the nerve fibers. The danger to a line of deep

sutures from vomiting is done away with. There is no danger of cocaine poisoning with the small dose necessary—that is, one-half grain injected intermitently throughout an hour. Morphine given after the operation would act as an antidote were poisoning possible. The operation is more thorough because of the absence of haste and the lack of need to save the patient pain. There are no evidences of pain during the operation. The cocaine solution should be made fresh. The solution is one-fifth of one per cent. for infiltration of skin and nerve trunks, and for subdermic infiltration half this strength is used. The line of skin incision should be infiltrated throughout its extent sufficiently tightly to maintain the local anesthesia for an hour. The aponeurosis of the external oblique requires no infiltration. It should be incised over the situation of the underlying ring; the ilioinguinal nerve will be exposed by retracing the flaps, and its trunk is then cocainized by a few drops of the solution. The incisions may be carried painlessly into the external ring, and the flaps reflected to expose Poupart's ligament and the conjoined tendon. The iliohypogastric, if found, may now be cocained. The margins of the internal ring are infiltrated. A line of infiltration along the long axis of hernial protrusion permits a clear cut through the hernial sac and coverings. The deck of the sac is infiltrated, dissected away from the underlying cord, ligated and amputated. The genitocrural nerve is cocainized. The sac is dissected away from the cord, and the operation completed. Operation on the female is easier than on the male.—*Medical Record*, October 21, 1905.

Operation vs. Catheter.

Dr. Riley Meyer, of New York, thinks it safer and better to operate than to resort to the use of the catheter in cases of enlarged prostate.

[The best results will not be reached in prostatectomy until the operation is done early, i. e., before the bladder is infected, and that means before the establishment of catheter life.]—ED.

Nail in Appendix.

Dr. Hal C. Wyman, of Detroit, reports (*Detroit Med. Jour.*, Oct., 1905) a case in which he found a nail in the appendix. It had been the cause of a pelvic abscess which had been opened by another doctor prior to Dr. Wyman's operation, which consisted in the removal of appendix and fallopian tube, which were adherent. The nail was clearly felt before the abdomen was opened by Dr. Wyman. "The nail was trying to pass from the appendix to the tube." The patient had swallowed the nail five years prior to the operation.

DEPARTMENT OF MATERIA MEDICA, THERAPEUTICS AND PEDIATRICS

In Charge of Budd Van Sweringen, M. D.

Professor of Theory and Practice of Medicine and Clinical Medicine in the Fort
Wayne College of Medicine.

Effects of Ergot on the Mammalian Circulation.

Torald Sallmann and E. D. Brown record a series of experiments in the *Jour. A. M. A.*, July 22, 1905, showing the effect of injecting ergot intravenously on dogs.

The common impression that ergot causes a powerful and persistent contraction of blood vessels was found to be wrong. The first effect of the injection is almost always a fall in pressure which persists but a few minutes, then a moderate rise follows, which is of short duration. The changes in blood-pressure are mainly cardiac, as shown by myocardiograms. The rate is but little altered. The action of ergot is directly on the cardiac muscle. Their therapeutic deductions are as follows: "Our experimental material contains no item which would point to ergot as a useful drug for modifying the general circulation. The reputed rise of pressure is too small, below 20 m. m.) and particularly too short, to have any significance. It fails most completely in conditions in which the blood pressure is low.

In making this statement we would not be understood as denying the existence of those vascular actions which have been discovered by some clinicians, and denied by others. We would merely say that these clinical observations are not supported by experimental evidence."

The Value of Nitroglycerin.

The *Therapeutic Gazette*, for June 15, 1905, says, regarding nitroglycerin: It is not many years since we called attention in these columns to the mistaken idea, which seems to be quite general, that nitroglycerin is to be employed in the course of exhausting diseases and in the event of circulatory failure as a stimulant to the heart and blood vessels. We pointed out at that time that there is nothing either in the clinical history or in the experimental records concerning this drug which would justify its use for this purpose, and we endeavored to emphasize the fact that the cases in which it really

does good are those in which the reduction of arterial tension produced by its influence results in relieving the heart of an extra burden which it is finding difficult to carry.

Two papers have recently appeared which more or less directly bear upon the use of nitroglycerin for its circulatory effect. One of these is by Dr. Clifford Allbutt, Regius Professor of Physic in Cambridge University, and the other is by Dr. H. P. Loomis, of New York. Dr. Allbutt, in discussing the prevention of apoplectic seizures, urges reliance upon proper rules of diet and modes of life rather than the employment of vascular sedatives, although he recognizes that under certain circumstances the additional use of drugs may be most advantageous. Dr. Loomis, on the other hand, contributes an article which is somewhat iconoclastic in its tendencies. He points out that in the dose of 1/100 of a grain three times a day, nitroglycerin in the majority of instances exercises very little real effect in reducing arterial tension. He also points out that these doses are not only too small to be advantageous, but that the action of the remedy is so fleeting that the effects produced by each individual dose last but a very short time. There can be no doubt that to some extent he is correct in these views, but on the other hand it is certain that many patients are benefited by these small doses given but three times a day, and that any increase in the size of the dose, or in the frequency of administration, produces headache or other evidence of the full physiological action of the drug.

Practical experience has convinced the writer of this editorial note that nitroglycerin is certainly one of the most valuable remedies which we possess, and therefore we are somewhat disappointed that Dr. Loomis should, so heartily, condemn it. He states in the course of his paper that he has come to rely upon chloral as a very much more efficient and satisfactory vascular sedative than nitroglycerin. No one who has employed chloral largely can have failed to have become impressed with the fact that it is a powerful and constant cardiovascular sedative, but it seems to us that its physiological action differs so materially in some respects from that of nitroglycerin that it cannot be considered, at least in many cases, as a satisfactory substitute. While it is true that it is an active vascular sedative in the sense that it reduces arterial tension, it is also a fact that such doses produce a simultaneous depression of the heart, and in the majority of cases in which nitroglycerin is indicated the condition is one of high arterial tension associated with more or less cardiac feebleness or fatigue. In other words, most persons who need nitro-

glycerin suffer not only from vascular tension, but from myocardial change, and require something which would relieve the heart of the resistance which is offered to its action, and avoid any drug which will simultaneously depress this viscus. It is for this reason that physicians almost universally rely upon a combination of nitroglycerin and digitalis in treating many persons of advanced years when these patients present tense vessels and a tired heart. As we have just said, these conditions certainly contraindicate the use of chloral, which is well known to possess a distinct depressant influence upon the heart muscle. In those comparatively rare instances in which, in association with arterial spasm, there exists excessive cardiac hypertrophy we can readily understand that the action of chloral may be advantageous. But we are inclined to believe that such persons will be benefitted more by aconite than by chloral, since its effects can be more readily controlled and immediately overcome by the proper use of stimulants, or by the withdrawal of the drug.—*N. Y. Med. Jour.*

A wedge of hard wood makes a gag quite useful, often, when administering anesthesia. A discarded thermometer case (or a hard rubber douche point) is a serviceable handle in which to mount, with candle grease or adhesive plaster, a stick of silver nitrate. Steel spring tape-measures are better than the wires generally sold for the purpose, for conducting to an x-ray tube the current from the coil or static machine; easily kept taut, and quickly adjusted, they are safest for the patient and most convenient for the operator; that they are not insulated is inconsequential—the coverings on the regular wires do not insulate the induced current. Cheap powder blowers, such as are used for insecticides, may be employed as insufflators in surgical work, and pepper boxes are useful for dusting powders.

Wooden skewers are serviceable nail-cleaners. Rolling pins and kitchen towel racks are very convenient for adhesive plaster, rubber tissue, etc., especially for hospital dressings. Grocers' bags are the most serviceable receptacles for soiled dressings. Tar-paper is a smooth, fairly waterproof material to tack on the floor when preparing a room for operation.—*American Journal of Surgery.*

DEPARTMENT OF OPHTHALMOLOGY OTOLOGY, LARYNGOLOGY & RHINOLOGY

In Charge of Albert E. Bulson, Jr., B. S., M. D.

Oculist and Aurist for St. Vincent's Orphan Asylum, the Allen County Orphan Asylum and the U. S. Pension Bureau for Northern Indiana and Northern Ohio; Professor of Ophthalmology in the Fort Wayne College of Medicine, Fort Wayne, Indiana.

Asthenopia Due to Latent Hyperphoria.

C. DeWayne Hallett describes a case of severe and agonizing neuralgic headache, which had occurred frequently during a period of fifteen years. The headache would incapacitate the patient for work and confine him to a dark room for several days at each occurrence. He had been treated by two competent oculists without relief. The author found that there was a combination of astigmatism and lack of muscular balance in the eyes, the muscular error in the two eyes being exactly opposite. After correction by prisms of the hyperphoria revealed by examination, it was found that there was a larger amount of latent than of manifest hyperphoria, and an increased correction was made on two occasions, with the result of permanent relief of the headaches.—*Medical Record*, Oct. 7, 1905.

New Test Types.

C. H. Williams, Boston (*Journal A. M. A.*, October 7), describes a set of test types on a plan first proposed by Dr. John Green, of St. Louis, and arranged according to geometrical progression as recommended by him. The series is more complete than that of the usual Snellen types, being a series of letters with equal intervals between the different lines, but the shapes of letters and most of the Snellen lines are preserved. The letters are arranged on reversible slats or a rotating card, which can be controlled by the operator; the letters are illuminated by a steady electric light. Each line of letters is printed in duplicate with a different arrangement of the letters when reversed; this is a new feature, in test types of this kind.

Collodion Dressing After Intranasal Operations.

K. Pischel, San Francisco (*Journal A. M. A.*, October 7), reports some modifications of his method of using collodion for postoperative intranasal dressing. He finds compound tincture of benzoin an excellent application before the collodion, and has adopted the expedient of using pieces of gauze instead of cotton. After finishing

the operation and stopping the bleeding with adrenalin, he cleans the surface and wipes it over with compound tincture of benzoin. Then he covers the wound with a piece of sterilized gauze, 1 by 2 cm. in size, carefully pressing it down on the posterior end of the wound where hemorrhage is most likely to occur. He then drops the collodion slowly on the gauze, while his assistant blows hot or cold compressed air into the nostril to hasten evaporation. The dressing forms a firm white membrane, protecting the wound from infection and preventing secondary hemorrhage. He leaves it in the nose from four to six days, and to remove it he cocainizes the nose and applies some peroxid of hydrogen, which loosens it, and then removes it with forceps. When dropping the collodion, an ordinary eye dropper will not suffice. It must be done slowly, and he uses a small metal tube with a rubber bulb, carefully cleansing it after use. As an additional precaution, he advises the patient to keep a small pledget of cotton in the nose while going home to catch any slight oozing that may occur. He has used this dressing in 243 cases, with perfect success in 233 of them.

The Indications for Operating in Acute Mastoiditis.

Philip D. Kerrison, in discussing this topic, says that the symptoms to be looked for when mastoiditis is suspected are mastoid pain, with consequent insomnia; elevation of the temperature; certain quantitative changes in the character of the discharge; mastoid tenderness, and bulging of the posterosuperior canal wall. The two symptoms usually considered pathognomonic are tenderness on pressure over the mastoid and bulging of the posterosuperior canal wall; but he shows that in either case these indications may prove deceptive. In acute purulent otitis media pus is probably always present in the antrum, giving rise to tenderness on pressure but not necessarily indicating mastoiditis. The significance of this symptom varies with its position on the mastoid cortex and becomes greater as it extends downward below the level of the floor of the antrum. Bulging of the posterosuperior canal wall is due to periostitis extending from the vault and is not an indication of mastoid inflammation, which may or may not be present. The following is in part the author's summary of the indications for operation: (1) Sudden cessation of the aural discharge, other symptoms persisting; deep-seated pain in the mastoid region; masked sensitiveness to pressure upon the mastoid *over an area extending well beyond the limits of the antrum*. (2) In the absence of fever the above symptoms, unless

yielding promptly, *i. e.*, in twenty-four to forty-eight hours, to abortive measures. (3) Marked tenderness over the antrum, persisting four to five days after free incision of Shrapnel's membrane. (4) Marked variations in the quantity of pus discharged; its maximum flow being, apparently, too great to be explained by the tympanic lesion; its periods of diminution being coincident with the development of mastoid pain or tenderness. (5) Mastoid tenderness having been present and having disappeared, a discharge from the tympanic vault, which resists all rational non-operative measures. (6) Finally, evidence of mastoid involvement having been present, the development at any time during convalescence of symptoms of septic absorption. The paper closes with a report of two cases.—*Medical Record*, October 28, 1905.

During narcosis, when stertorous breathing calls for extension of the jaw, it is well to hold it forward first on one side, then on the other, alternating at short intervals. Long, continued pressure at the angle or angles of the jaw produces much soreness. Often the jaw can be kept forward by catching the lower incisor teeth in front of the upper ones (if they are strong); a single finger on the chin is enough to maintain this position.—*American Journal of Surgery*.

When scissors become "catchy" their edges can often be surprisingly smoothed by carrying each blade repeatedly from lock to tip between the firmly pressing thumb and forefinger. Each kind and size of scissors has its own capacity, and should be used only for what it is intended. Ophthalmic instruments are not intended for ordinary dissections, tissue scissors should not be used for cutting bandages, nor bandage scissors for plaster of Paris.



BOOK REVIEWS

***The Elements of Homoeopathic Theory, Materia Medica, Practice and Pharmacy.*—**

Compiled and arranged from Homoeopathic text-books by Drs. F. A. Boericke and E. P. Anshutz. 196 pages. Cloth, \$1.00. Postage, 5 cts. Philadelphia, Boericke & Tafel. 1905.

We suppose those who practice Homeopathy may be interested in this little book. It would seem, however, that little confidence could be placed in a work which declares tetanus to be due to "injuries to nerves," and that *hypericum perforatum* in the IX or mother tincture will "abort the disease in many cases and cure many more fully developed."

There are many more just such remarkable statements.

B. VAN S.

***The Principles and Practice of Medicine.*—**By Willam Osler, M. D., Regius Professor of Medicine, Oxford University, etc., etc. D. Appleton & Co., Publishers, New York.

It is entirely unnecessary to endorse the sixth edition of a work so well known as Osler's Practice. We know of none better either for student or practitioner.

B. VAN S.

***A Text-Book of the Practice of Medicine.*—**For Students and Practitioners. By Hobart Amory Hare, M. D., B. Sc., Professor of Therapeutics in the Jefferson Medical College, of Philadelphia; Physician to the Jefferson Medical College Hospital; One Time Clinical Professor of the Diseases of Children in the University of Pennsylvania; Laureate of the Royal Academy of Medicine in Belgium; of the Medical Society in London; Author of "A Text Book of Practical Therapeutics," and "A Text Book of Practical Diagnosis." Illustrated with 129 engravings and 10 plates in colors and monochrome. Lea Brothers & Co., Philadelphia and New York. 1905.

The appearance of a new volume on the practice of medicine by an American author is an event worthy of more than passing notice. Dr. Hare is well known to the American medical public as an author in various departments of practical medicine, so that this volume comes with the substantial endorsement of much excellent matter from his pen and predisposes us largely in its favor.

A careful examination of the volume shows that we are not to be disappointed in anticipating the addition to American literature of a new work on the practice of medicine which is entitled to full recognition. This is a source of gratification, not because there is any lack of such volumes in the market at the present time, but because we are always interested in the individuality of the methods of this clinician who has obtained pre-eminence. There is nothing striking in the methods or matter of the volume as it goes over the

ground in much the usual manner, and for the most part reflects opinions entirely orthodox in their character. The ample experience of the author, however, is reflected in every chapter, and it is this which gives to the volume its interest and value, and which cannot very well be reproduced in a brief review.

The volume is cordially recommended as an addition to the library of every medical man.

G. W. McC.

Clinical Treatises on the Pathology and Theraphy of Disorders of Metabolism and Nutrition.—By Professor Dr. Carl von Noorden, Physician in Chief to the City Hospital, Frankfort a. M. Authorized American Edition translated under the direction of Boardman Reed, M. D., Professor of Diseases of the Gastrointestinal Tract, Hygiene and Climatology, Department of Medicine, Temple College; Physician to the Samaritan Hospital, Philadelphia, etc. Part VI. Drink Restriction (Thirst Cures), Particularly in Obesity. By Professor Carl von Noorden and Dr. Hugo Salomon. New York. E. B. Treat & Co. 1905.

The recent visit of Professor Von Noorden to this country gives added interest to anything emanating from his pen. This little brochure is one of a series which have recently been issuing from an American publisher, and is of much more than passing interest.

The "thirst cure" was at one time a therapeutic fad and like most such fads has running through it a substratum of truth, and there can be no doubt that under certain conditions drink restriction rationally prescribed and scientifically regulated is an excellent adjunct of treatment. This is especially true of obesity and certain forms of heart disease in which it is desirable to lighten the burden of the circulation to as great an extent as possible. That there are certain evils of metabolism and impairment of elimination resulting from such a method cannot be doubted, but these may be the lesser evils as compared with the conditions which they are sometimes successfully prescribed to relieve. The book is recommended to those interested in the subject.

G. W. McC.

Harrington's Practical Hygiene.—A Treatise on Hygiene and Sanitation. For Students, Practitioners, Health Officers, etc. By Charles Harrington, M. D., Assistant Professor of Hygiene in Harvard University Medical School, Boston. New (3d) edition, thoroughly revised. In one octavo volume of 793 pages, with 118 engravings and 12 plates. Cloth, \$4.25, net. Lea Brothers & Co., Publishers, Philadelphia and New York. 1905.

This is a very comprehensive work. The subject matter should be in the possession of every practicing physician. We would commend the chapters on water and foods to the health officers and legislative bodies of all communities. School trustees would do well to read the chapter on "Habitations, Schools, Etc." It contains matter of special interest to those engaged in almost all pursuits, and therefore should be widely read.

It is well written and entertaining.

B. VAN S.

Fort Wayne Medical Journal-Magazine

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EDITORIALS

Ventilation.

The hord of agents who are at present trying to sell the good people of Fort Wayne all sorts of patented weather strips or contrivances for keeping the air and dust out of houses, reminds us that there are always fish that will bite almost any kind of bait.

We are willing to admit that some houses are so poorly constructed that great gaps exist under doors and window sashes, through which the cold frosty air of winter and no small amount of dirt finds entrance to the house, to the discomfort of the inmates and a decided drain upon the winter supply of fuel if the temperature of the living rooms of the house are to be kept to a comfortable degree of warmth. But the majority of houses, and especially the houses of those who are able to afford the expensive contrivances that are now devised

to hermetically seal all the openings under doors and window sashes, are so well constructed that when the windows and doors are properly closed, no great amount of either air or dust can enter for want of sufficient opening. The absurdity of the argument that contrivances for keeping out the air and dust which comes in from under doors and window sashes will keep the house clean, is apparent when we take into consideration the fact that every time a door or window is opened a current of air laden with dust comes in and practically does as much ill-effect as is produced by the very limited quantity of air and dust which comes in from under the doors and window sashes.

But the worst feature of this mania for contrivances to keep out air and dust is the tendency to educate people to avoid ventilation. We venture to say that some of the houses of the poor, where the air, the dust, and even the rain and snow comes in through large cracks under the doors and windows, and perhaps occasionally a knot hole or broken pane of glass, are far better ventilated, the air much purer, and the inmates far more healthy than in the houses of the rich where frequently but little attention is paid to ventilation, and where pure fresh air, so much of a necessity in the promotion of good health, is kept out by having every opening closed and the cracks under windows and doors, which might afford some slight ventilation, hermetically sealed by some expensive contrivance invented by some enterprising person to prey upon the credulity of mankind.

Too often the good house wife shuts out the pure air so necessary for the health and comfort of her family because she is afraid that a little dust will get on her clean furniture or floors, and the male head of the house is equally willing to put up with a lack of ventilation because he thinks that the entrance of cold air to the house necessarily increases his fuel bill. Too often, as well, the good house wife darkens her house with huge awnings or heavy window shades on the plea that the bright light fades her carpets or makes streaks on the wall paper. Is it any wonder that the children reared in such houses are like hot house plants which require constant attention in order to keep them alive, and that many of them suffer from diseases or actually die for the want of a sufficient amount of fresh air and sunshine?

We believe in cleanliness, but we think that a little more labor should be expended in removing the dust or dirt which comes in under a window-sill or door, or through a window that has been opened for ventilation, than to keep clean at the expense of ventila-

tion. We believe in keeping warm and comfortable in the winter time, or any other time, but we think that a little more coal had better be burned in warming fresh air than to economize at the expense of breathing vitiated air. It is cheaper to pay for a little extra help to clean the house of dust that comes in through an open window, and cheaper to pay a little larger fuel bill than it is to pay the bills of the doctor, the druggist, the undertaker and the cemetery association. And it is not only economical, but it makes for the actual comfort and happiness of those who practice it.

With the advocacy of the open air treatment of consumption, and the beneficial effects that have been known to occur in connection with such treatment, has come a change of ideas regarding the effects of open air or draughts in the household. At present there are many who not only believe in living in houses through which the pure air from out doors comes into the house in large quantities through a window or other opening, but they have seen the beneficial effects of following such a practice. But more people should be encouraged to adopt an effective system of ventilation for their houses, and physicians in particular should advise their patients to avoid vitiated atmosphere even at the expense of a little dirt which may come in through an open window, and an increase in the fuel bill brought about in warming the circulation of fresh air. If our patients can only be taught that more ventilation means better health, and that there is no occasion to be afraid of a little draught of air, there will not be quite so many contrivances for keeping the air out of houses sold to susceptible individuals, and perhaps physicians will not have quite so much to do in caring for those who have become ill indirectly through the breathing of vitiated atmosphere, but the community as a whole will be benefitted.

A. E. B., JR.

Proprietary Medicines.

The papers of Henry P. Loomis and C. S. N. Hallberg in the *Jour. A. M. A.*, Dec. 9, 1905, on the proprietary medicine question should be productive of good. The former discourages physicians from using compounds whose formulæ are not given, or those whose physiological action is set forth in a meaningless jumble of technical language unintelligible even to the ordinary physician. He calls attention to the fact that the majority of them are compounds of well known drugs.

The latter shows the similarity which exists between the names of widely different proprietary medicines and also some of similar uses

which were evidently so named for the reason that they might be confused by intending purchasers and the one receive the benefit of the advertising of the other.

He pleads for a systematic, scientific nomenclature and the avoidance of all compounds which can not be prescribed by such name. He says: "The thing to do is to carry a case for infringement of a trade name to the supreme court and get a decision in line with former cases, such as Castoria and Syrup of Figs, which will once and forever prevent exclusive use of a coined name for a medicine when there is no other by which such article may be designated. The nomenclature is the crux of the proprietary medicine question."

The paper of Frank Billings in the issue of Dec. 2, 1905, should also be commended to the attention of all practicing physicians. His arraignment of the medical journals for publishing nostrum advertisements is just and timely. B. VAN S.

Reforms in Our Jails and Other County and Municipal Institutions.

We have on one or two other occasions during the past ten years had occasion to call attention to the urgent necessity for certain reforms in the disposition and care of our municipal and county criminals and dependents. The recently published report of the Board of Charities and Corrections reminds us that for many years but little has been done to alter the conditions surrounding the city and county charges, and that the conditions as they exist today are not only a disgrace to the community, but in some instances open to the charge of criminal neglect on the part of those responsible for the management.

Eight years ago, in an editorial on the subject, we called attention to the injustice of not only crowding a large number of paupers and insane into poorly furnished and even filthy quarters at the county poor house, but that it was inhuman to deprive many of the curable insane of the benefits of such skilled attention and comfortable quarters as are furnished at the state asylums for the insane. We have also, in editorial utterances, called attention to the vicious practice of throwing juvenile criminals and first offenders into the company of hardened criminals. The disease and vermin breeding condition of our city and county jails has also been the subject of criticism, and we have more than once advocated a system of cleansing and fumigation, to be applied to the city and county jails and their occupants, which we know would go a long way toward stampi

out filth and disease, which, without such precautions may be and frequently is spread over wide areas.

The report of the Board of Charities and Corrections exposes a dereliction of duty which ought to be seriously considered by the general public, and especially by the voters who elect those who are to control the affairs of our jails, almshouses, and other institutions of charity or correction. According to the report, the county poor asylum is overcrowded and the institution sadly in need of even the ordinary necessities required in order to make the inmates comfortable. This follows on the heels of a newspaper investigation which showed that the condition of the poorhouse was such that even the lives of the inmates were in jeopardy from insecure walls and the possible falling of a large poorly supported tank of water which is located in the upper portion of the building. There have also been reports of not only very poor quality of food but an insufficient quantity of it. And to add to the discomfort occasioned by a lack of chairs and other furniture, has been the added discomfort and unpleasantness occasioned by the presence of vermin and other filth.

With reference to the county jail the report says: "We regret to report the conditions there existing as inadequate and unsanitary. * * * It is a mistake to believe that the work of reforming can be accomplished in a jail where the first offender is surrounded by hardened criminals who when congregated share in a bond of sympathy and exchange views which initiate and take into their membership the young and first offenders. * * * The existence at our jails of conditions which permit a fourteen-year-old lad to serve his sentence by spending his time idly in the company of a score of hardened criminals, is wholly wrong, as it can result in neither reforming or correcting. Likewise permitting a thirteen-year-old girl to remain locked up in the same cell room with several of her sex, and several insane women, tends only to degenerate, as it fails to supply the needs of a moral and the spiritual side of man's nature and renders purity of thought and speech an impossibility among such environments. * * * We find that six rooms now vacant and unused are available and could, without great expense, be used for boys, girls, women, insane and sick respectively. We also suggest that a plentiful supply of hot water for bathing be piped from the county power house which is located just north of the jail. Lastly, we wish to suggest that the rough and uneven walls in the cells be gone over with a smooth coat of cement so as to *exclude the vermin*, and that the drainage be improved so that all sewage will be carried

off instead of being backed into the basement and kitchen, as is the very unsanitary condition now prevailing."

This report, which we know states the conditions mildly, indicates that a radical change in the management of these institutions is imperatively demanded. Perhaps those actively in charge have done all they could do under the circumstances, being held down by their superiors, though we even doubt such being the case. The essential fault lies with the county commissioners and all others upon whom the management of these institutions falls. We cannot expect to have our houses of charity and corrections well managed if we do not put at their head men with not only good business ability, but men possessing common sense ideas of public health and sanitation, and logical and intelligent views regarding the proper manner of humanely treating our dependents. These institutions should be divorced from politics entirely. It is nothing short of an outrage that much needed improvements at our county infirmary should be opposed for political reasons, as has been the case more than once. And it is a disgrace to our civilization to have the poor at the infirmary given bad food and deprived of the ordinary comforts on the ground that it is "good enough for paupers." It is equally a disgrace to permit our jails to be the breeding places of vermin and disease on the ground that it costs too much effort and money to keep the places clean. What we need is more efficiency and less politics; more brains and less pretended intelligence. It is hoped that when we have another election the needs of these institutions will be taken into consideration, and that capable and broad-minded men will be given the preference, and in particular men who are possessed of a little of the milk of human kindness which they are willing to bestow upon the unfortunates placed under their care.

A. E. B., JR.

Operations for Paralysis of the Facial Nerve.

Facial paralysis presents such a striking deformity and produces such a variety of disagreeable symptoms that any measures offered for its relief should be seriously considered. When the paralysis is of central origin it is nearly always permanent, but it is a well known fact that injury to the facial nerve in mastoid operations does not always produce permanent paralysis, and cases have been reported in which an actual severance of the nerve, but without further injury, have recovered through reunion of the severed ends. By far the larger majority of cases of facial paralysis due to mastoid operations

recover in from six weeks to two years because the nerve has been but slightly wounded and not severed or any portion of the entire diameter of the nerve actually destroyed. When a paralysis has existed for one year without the slightest indication of improvement as a result of the efforts of nature or the physician to bring about resumption of function, the paralysis may be considered permanent. It is in such class of cases that it has been proposed to correct the trouble by attaching the dead facial nerve to a nearby motor trunk. The subject is of such interest that we give the report of a case operated by Dr. John A. Bodine, of New York, (reported before the New York Post Graduate Medical Society) in which the method of procedure is fully described. There is a difference of opinion as to how long after paralysis occurs anastomosis can be attempted with success, and the consensus of opinion is that it should be done within four or five years, as within this period of time the nerve to a certain extent is in an active condition. The case reported by Dr. Bodine is therefore not the most favorable for successful results, but it serves to show the method of procedure, and in cases of more recent origin than the one reported might be more successful. Twenty-three years ago the woman had had facial erysipelas, which was followed by facial paralysis. At the time of operation there was ordinary atrophy and flaccidity of the cheek, the staring eye and the mouth twisted over to the well side. An attempt to cure this patient seemed justifiable, as six cases had been reported in which the dead facial nerve was attached to a nearby motor trunk and two patients had been cured. The best results, however, follow those cases of facial paralysis due to traumatism, as in mastoid operations.

Dr. Bodine said he had not attempted an operation for a long time that was easier, technically, than the one he performed on this patient. The facial nerve in this case was represented by a mere fibrous cord, in which, however, some axis cylinder was discovered. The spinal accessory nerve was not utilized, for if it is not cut in two and an end to end anastomosis performed, every time the patient laughs the shoulder jerks. If the nerve is divided, there is a troublesome atrophy of the shoulder muscles.

For anatomical as well as physiological reasons, the motor nerve selected was the hypoglossal. The muscles of the tongue supplied by this nerve are in closer communication anatomically and physiologically than those of the spinal accessory, although the latter nerve is much more easily found and identified.

After the incision through the skin and superficial fascia, beginning

at the level of the external auditory meatus and extending downward for two inches along the anterior edge of the sternomastoid muscle, one must be careful to separate the parotid gland from the anterior edge of this muscle without injury to its capsule, otherwise the parotid secretion will flow into the wound. Retracting the parotid gland toward the edge of the sternomastoid muscle posteriorly one may readily identify the styloid process, and winding around its base is always to be found the facial nerve. It does not require five minutes to expose and identify this nerve. The transverse process of the second cervical vertebra is next identified, and just anterior to this and posterior to the internal jugular vein, beneath or imbedded in the loose fascia, lie the pneumogastric and hypoglossal nerves. The positive identification of the hypoglossal is made by pinching it with thumb forceps, or by electrical stimulation. Usually, however, the more superficial of the two nerves is the one in question. A slit is made in the sheath of the hypoglossal nerve, and after cutting the divided facial nerve wedge-shaped, the latter is wedged into the slit and held by two sutures through the sheath, and the wound closed without drainage. The speaker said that the operation had been performed five days ago and up to the present time the result had been good, but three or four months must elapse before permanent results would be apparent. A. E. B., JR.

Behring's Attitude.

From good authority we learn that Professor Behring was recently asked by Dr. Bernheim for some of his bacillus preparation, mentioned at the recent Tuberculosis Congress, for human experimenting, but Behring refused to supply it on the ground that the preparation deteriorated in travel. The professor also deprecated human experiments before the lapse of a year and said that he had good reasons for not revealing the method of preparation.

Is Behring's attitude in this matter defensible? That there may be good and sufficient reasons for objecting to human experiments with the product until more is known of it can not be doubted. But what harm can come from divulging to the profession the method of preparing the product? It might rob Professor Behring of a little cheap notoriety and it might prevent him from making some money which he otherwise might make. Surely these considerations are as nothing compared with the crying need for knowledge on this subject. If Behring's product is worth anything, if it is really a cure for consumption, then every day that it is withheld costs many valuable

lives; if it is worthless, then the sooner it is known to be so the less time will be wasted in experimenting with it.

The best and quickest way to arrive at the facts concerning this and similar products is to make known to the profession the method of their preparation. In this way there would soon accumulate a mass of facts from the various laboratories such as could not be accumulated in a single laboratory in years.

Personally, we do not think that Professor Behring would lose either honor or money by divulging his secret. It is conceivable that he might lose money by divulging it, but it is certain that he would gain honor by so doing.

To us Behring's attitude in this matter savors of quackery. Quackery may be excused if practiced by the ignorant, but when it shows its head in high places it should be hit quick and hard.

M. F. P.

Behring's Treatment for Tuberculosis.

The fact that von Behring has announced a cure for tuberculosis, soon to be given to the profession and public, has led to much speculation as to its nature, as well as to a review of his work along this and other lines in order to arrive at a correct estimate of the amount of importance to be attached to such a stupendous announcement. The development of diphtheria antitoxine can largely be credited to Von Behring, and this one achievement is great enough to command respect for any statement he may choose to make. Then, too, it is a matter of fact that he has already accomplished a treatment of calves which renders them immune to tuberculosis. This he has been doing for the last four years. In that time the calves so treated have failed to contract the disease, although they were herded with cattle known to be tuberculous and housed in infected stables. The material with which they are injected consists of a sterile emulsion of dried tubercle bacilli. The first dose is 0.004 gramme, given in the jugular vein. Three months later a second injection of 0.02 grammes is given and the treatment is complete at a cost of one and one-half marks; (about 35 cents).

The greatest criticism von Behring has received has attached to his views concerning the importance of the gastro-intestinal tract as an avenue of infection. It will be remembered that he considers milk the most frequent source of infection and that in a very early period in life. This view is opposed by Koch and others who quote the statistics of those engaged in dusty occupations to prove the

inhalation proposition, as well as the location of the early lesions which apparently point to the lungs as the organs first affected. In view, however, of the fact of bovine immunity already accomplished incredulity seems dangerous and one can only speculate upon the nature of the substance with which he is working. This would seem to be some antibodies perhaps obtained from the immunized calves. His promised communication next August is awaited with great interest.

B. VAN S.

ORIGINAL ARTICLES

No paper published or to be published elsewhere as original will be accepted in this department.

Clinical Night at St. Joseph Hospital.

CASES BY

DRS. C. B. STEMEN, ALBERT E. BULSON, JR., AND MAURICE I. ROSENTHAL

REPORTED BY

DR. J. C. WALLACE

Secretary of the Fort Wayne Medical Society

FORT WAYNE, INDIANA.

The Fort Wayne Medical Society met in regular session at the St. Joseph Hospital Tuesday evening, Nov. 21st, the printed program announcing that clinical cases would be presented by Drs. Stemen, Bulson and Rosenthal. There were forty-five members and guests present when President Drayer called for the first part of the program which was in charge of

DR. C. B. STEMEN.

Crushing Injuries of the Ribs and Clavicle. (Patient exhibited.) Two weeks ago the patient, a conductor on the Pennsylvania Railroad, was caught and crushed between drawbars. Upon entrance in the hospital he was pulseless from hemorrhage and shock, and suffering great pain. He was at once given one-quarter grain of morphia and one-thirtieth grain of strychnia. (With reference to this Dr. Stemen said he wished to call attention to the opposition to the giving of strychnine in such cases. He said he gave it for two purposes; First, to assist in arresting hemorrhage, by stimulation of the contracting fibres of the arteries, and, second, to stimulate the heart action.) The patient was also given an enema of normal saline solution. Upon examination it was found that the second, third, fourth and fifth ribs and clavicle were fractured, and the parts much

misplaced. There was evidence of rupture of the intercostal arteries, and the patient was vomiting blood, indicating injury to the stomach. The abdomen was greatly distended, and there was marked emphysema of the tissues which was thought to come from a perforation of the diaphragm, permitting the air from the lung to pass into the abdominal cavity. The broken ribs were rearranged as best possible, and a thoracic bandage applied. Owing to the difficult respiration the bandage was not put on tight but with sufficient pressure to give support. The next morning the patient was still vomiting blood, and the bandage was then tightened. During the night the emphysema and distention had disappeared in part, and has since disappeared altogether. The condition of the patient has slowly improved since the date of the accident, there being no marked disturbance of the temperature, and no symptoms of pneumonia. Yesterday there was a slight rise of temperature, and as there was indication of fluid in the chest, the thorax was opened. Three pints of serum and blood were removed. There has been no expectoration of blood, so there could have been no extensive perforation of lung tissue. There was so much contusion of the tissues that adhesive strips were not applied to the skin, though they were applied to bandages to hold them in place. Attention was called to the position of the clavicle which was thought to be normal. The patient appeared to be comfortable, and gave promise of making a good recovery.

Crushing Injuries Below the Knees with Preservation of Limbs. (Patient exhibited.) CASE 1: The patient, a conductor on the Pennsylvania Railroad, received a crushing injury of the left foot from having it squeezed between freight cars. When brought to the hospital it was found that three toes were so badly crushed and mutilated that amputation was necessary. There was, however, fracture of several of the tarsal bones and considerable crushing of the tissues which presented an edematous and chemotic appearance. It was deemed advisable to make an attempt to save the foot rather than amputate it, and accordingly incisions were made to allow the serum to escape, and to prevent internal strangulation. The injured parts were elevated and put at rest and have received careful attention since. The indications are that the foot is going to be saved, and though it will remain tender for some time, it is better than no foot.

CASE 2: (Patient exhibited.) In this case a brakeman on the Pennsylvania Railroad received a crushing injury of the left foot, which, while producing fracture of some of the tarsal bones,

caused severest injury to the soft tissues which were badly contused and lacerated. As arterial circulation was present the foot was not amputated but treated on the expectant plan. The parts were adapted as carefully as possible, and bandages applied, due attention being given to drainage. Recovery has been slow, but there is every evidence to show that the patient will have a useful foot. Owing to contraction of tissues it was thought that perhaps a mistake had been made in not dividing the tendo-achilles, but as the foot now appears to be coming down as the patient gradually begins to use it, there is reason to believe that no mistake in this direction was made. At all events when the foot gets well the patient will be much better off than he would with a stump.

In discussing these cases in general, Dr. Stemen said that surgeons were criticized for their hasty decisions to amputate, and they were also criticized for too much conservatism. It is not always possible to draw the line where conservatism should cease and where radical operative measures should begin. He said that he had always made it a rule to make every effort to save a limb, believing that in the majority of cases it was time to amputate when after a thorough trial it was found absolutely impossible to avoid such a procedure. In his very large experience with crushing injuries of the limbs he had often been able to save a useful limb through conservatism when other surgeons and assistants and even he himself had thought that amputation was indicated. He therefore wanted to enter a plea for conservatism in the treatment of all crushing injuries.

The second part of the program was in charge of

DR. ALBERT E. BULSON, JR.

The Avoidance of Deformity Following the Radical Mastoid Operation was the subject of a talk by Dr. Bulson, and three patients upon whom the radical mastoid operation had recently been performed were exhibited in illustration. He said that he used to think that a deformity, consisting of more or less depression in the mastoid region behind the ear, was unavoidable following the radical mastoid operation, and while it is yet impossible to avoid deformity in some cases where there is extensive destruction of bony tissue, yet as a result of improved technique it is now possible to avoid much deformity in a large proportion of cases. The three patients exhibited had suffered from chronic otorrhœa and accompanying mastoid involvement, with considerable destruction of the bony tissue. The radical mastoid operation had been performed, which consisted in

removing all diseased tissues, and in cutting away the bony wall separating the tympanic cavity from the mastoid antrum, thus throwing the two into one cavity. As a result of long continued packing of the wound, through the external opening, the depression had filled with granulation tissue and at the site of the operation there was simply a scar without manifest depression. He particularly emphasized the importance of continuing the packing under aseptic precautions until the cavity had filled from the bottom with healthy granulation tissue. There is usually a decided tendency for the opening to close on the skin surface, thus leaving an underlying cavity which from sinking of the surrounding tissues produces deformity. This outer opening must be kept open under any circumstances so that the packing can be continued while the cavity is filling from the bottom. He also exhibited a fourth case of mastoid involvement in which the antrum had been reached by opening through the posterior superior wall through an existing fistula. The case was complicated by lymphatic involvement in the neck and preauricular region from sepsis. Dr. Bulson said that in this case the radical mastoid operation would have been performed had the patient given his consent to such a procedure before being placed under the effects of an anesthetic. As it was the patient was relieved as much as possible by thorough and careful curettement through the fistulous opening, and drainage of the broken down lymphatic tissue.

The Temperature in Sinus Thrombosis was also the subject of remarks by Dr. Bulson, and owing to his neglect to bring a temperature chart with him, showing the variations of the temperature in the patient upon whom he had operated, the subject was illustrated by blackboard drawings. He said that if during the course of a middle ear suppuration or mastoid involvement, either before or after operation, the temperature suddenly goes up from two to five degree and then as suddenly drops to subnormal with a pronounced chill, then again suddenly rises several degrees only to again drop to subnormal, a diagnosis of involvement of one of the large venous trunks may with reasonable certainty be made. The so-called "stepped chart record of temperature" is very characteristic of sinus thrombosis, and in nine cases out of ten indicates involvement of the lateral sinus with necessity for operative interference if the patient is to be saved from general pyæmic infection and death. In these cases the proper procedure is to lay bare the lateral sinus, and in the presence of a

thrombosis open the sinus and clean it out thoroughly from the knee to the jugular bulb.

Some Peculiar Features Connected with Interstitial Keratitis, with exhibition of patient, was another subject discussed by Dr. Bulson. The patient was suffering from typical interstitial keratitis undoubtedly due to inherited specific trouble. The cornea presented the well marked ground-glass appearance from infiltration of the substantia propria. Dr. Bulson said that the case was seen when the disease first started, and when the haziness of the cornea involved only a very small crescentic area in the upper portion of the cornea. Inunctions of mercury were at once prescribed, together with tonics and hot compresses. Despite the treatment the disease progressed until practically three-fourths of the cornea had become involved and vision had been reduced to counting fingers. It had then suddenly began to improve, and had continued to improve up to the time of the exhibition of the patient. He said the peculiar feature of the case was that while under very active treatment, and while the eye was improving, the fellow eye developed interstitial keratitis. He said that the disease in the second eye involved had continued for a few days and then apparently began to improve. He reported that he was employing sub-conjunctival injections as treatment and did not know whether to attribute any favorable results to treatment or not, as these cases so frequently rapidly improve after specific treatment has been crowded for two or three weeks, and sometimes have been known to improve without any treatment whatsoever.

Punctured Wound of the Eye-Ball in the Ciliary Region with Prolapse of Part of the Contents, and Preservation of Good Vision was the next subject presented by Dr. Bulson. Patient, who was exhibited, had been struck in the eye by a flying piece of porcelain broken from an electric light socket. The eye-ball had been punctured in the region of the limbus on the nasal side, the opening being about one-fourth of an inch in length, through which there was prolapse of iris and vitreous. The prolapsed iris had been carefully withdrawn and excised, and the overlying conjunctiva stitched to prevent further loss of vitreous. The patient made a good recovery with preservation of practically normal vision and no entanglement of iris in the cicatrix.

A Case of Melanotic Sarcoma of the Choroid was also reported by Dr. Bulson, and gross and microscopic specimens exhibited. The patient had come for attention on account of loss of vision which had

been slowly progressing for some months. He had not suffered from any pain or discomfort. A diagnosis of intraocular tumor, probably of sarcomatous type was made, and enucleation advised and accepted. The gross specimen showed a pigmented tumor of the choroid about the size of a cherry, crowding the retina forward into the vitreous. The ciliary body and iris were not involved and there appeared to be no marked glaucomatous symptoms. There was detachment of the retina opposite the tumor. The microscopic sections, prepared by Dr. Rhamy, showed that the tumor was of the large spindled celled variety. Patient made an uneventful recovery, but the history of these cases is that there is a recurrence, usually by metastasis, in the course of from one to five years.

The third part of the program was in charge of

DR. MAURICE I. ROSENTHAL.

Method of Preparing and Using Normal Salt Solution. Dr. Rosenthal opened his clinic with a practical demonstration of the principles underlying the proper proportion of salt in making a normal salt solution for transfusion. He said that intravenous transfusion of normal salt solution in cases of hemorrhage and shock may be depended upon as a life saver and is second to no other treatment, if properly carried out.

There are two great dangers in using this transfusion; First, fatal shock from throwing into the circulation a cool solution; and, Second, solution and destruction of the blood cells and coloring matter because of an incorrect proportion of salt. To prevent the former the doctor presented a glass tube containing a thermometer. This glass tube is intended to be inserted into the rubber tubing so that the solution passes through it and over the thermometer just before it enters the vein. In this manner the temperature may be noted after the solution has passed through the tubing where a certain amount of cooling takes place. This combined thermometer and tube should always be used. The solution should never be below 110° F. and may be as warm as 120° F.

The doctor next presented three jars containing blood and different strength salt solutions to demonstrate the proper amount of salt which should be used in making the normal salt solution. These jars were prepared in the morning, and each contained, in addition to the salt solution, one drachm of fresh human blood removed directly during an operation. Jar 1 contained a three-tenths per cent. salt solution. The blood showed no coagula but a clear red solution,

although it had been standing ten hours, showing that the cellular elements were actually dissolved and the blood destroyed. The doctor said this is just what happens when such a solution is thrown into the circulation, and accounts for the sudden rise in temperature to 104° , 105° , or even 106° after a saline infusion. Jar 2 and 3 contained the one drachm of blood in a six-tenths per cent. and a nine-tenths per cent. solution of salt respectively. In these jars the cellular elements of blood had settled to the bottom of the jar (no coagula) while the supernatant fluid (salt solution) remained clear, showing that there was no dissolving out of the hemoglobin. On shaking these jars the cellular elements of the blood again became suspended in the fluid just as they normally are in the liquor sanguinis. From this experiment is deducted then that a solution of not less than six-tenths to nine-tenths per cent. of salt should be used for intra venous transfusion for fear of destruction of the blood.

Demonstration of Operation for Cancer of the Uterus. Next Dr. Rosenthal demonstrated the Wertheim radical operation for cancer of the uterus from charts prepared for the purpose. Speaking of cancers in general the doctor said: "All cancers are, of course, malignant; some, however, are much more malignant than others, and some grow very rapidly and produce metastasis rapidly. These latter we may term the malignant cancers, while those which grow very slowly and produce metastasis very late we might term benign cancers." To illustrate what may be done in malignant and very much advanced cancer a lady patient was introduced upon whom the doctor had operated by the technique followed by Kocher. Operation on January 6th, 1905, or about one year ago. She had an unusually large degenerating cancer of the breast, with great bunches of metastatic growths in the axilla and supra-clavicular space. She was told that an operation would be of very doubtful value to her, but she was very desirous of being relieved from the "foul smelling growth" so the radical operation was attempted after removing both pectoralis muscles and dividing the clavicle with a Gigli saw. A metastatic gland was found under the first rib and removed, together with those above the clavicle and under the arm. Clavicle was reunited with silver wire. The large loss of cutaneous covering was replaced in part by skin from the back. A number of glands were found along the longus thoracic vessels. Notwithstanding the extreme malignancy of this growth and its far reaching metastases, the patient is in excellent health and at least apparently free from cancer. The removal of the pectoralis muscles does not limit the movement

of the arm, as she puts her hand on top of her head with ease. (Demonstration by patient.) The doctor said that just such results have been obtained by the Wertheim operation, even when the cancer had advanced to what seemed an inoperable stage. Good results in cervical cancer of the portio vaginalis have been secured from high amputation, and in cancer of the fundus from vaginal hysterectomy, but nothing had been accomplished in cancer of the portio uteri, or in far advanced cancer of the portio vaginalis except by the radical abdominal operation.

"I may say, and men of experience will agree with me, that the operations by the vaginal route for cancer of the cervix portio uteri have all been failures. These are the malignant cancers of which we have spoken. They produce metastasis high up in the pelvis early, and by the vaginal operation always return in the vaginal scar. The Wertheim operation gives accessibility to the pelvic glands, and at the same time prevents returns in the scar because of the broad incision of the vaginal tube which it makes possible. This specimen (showing specimen) illustrates this nicely. The uterus, tubes, broad ligaments and over one inch of the vagina have been removed in one piece. Note the distance from the uterus at which the broad ligaments were excised and uterine arteries ligated. This uterus was removed this morning from a nulliparous woman who had passed the menopause. She gave a history of having always been regular until menstruation ceased entirely. Later had an odorous watery discharge tinged with blood, accompanied at times by hemorrhages, pain in region of bladder and lower pelvis. The curette and finger revealed a broken down cellular growth of the portio uteri. The removal of the specimen was accomplished as follows: First, the vagina was cleansed, and the uterus and cervix curetted and cauterized. Patient was then placed in the Trendelenberg position and abdomen opened. The ureters were laid bare down to the broad ligaments by splitting the peritoneum over them. The ovarian arteries were secured on both sides and the utero pubic ligaments ligated. The broad ligaments, right and left, incised. The uterus was now drawn upward and the bladder loosened by an incision through the peritoneum at the utero vesical fold, and the bladder stripped from the uterus and vagina, bringing the bladder ends of the ureter to view. Now with both ureters in full view the finger was pushed through the parametrium so that the ureter lies under and the uterine artery over the finger. With the ureter in view and protected by the finger the uterine artery was easily ligated at a

considerable distance from the uterus. This was repeated on the other side, and now the uterus was drawn up in such a way as to place the utero sacral ligaments on the stretch. The peritoneum across the posterior vaginal wall was now incised and the vagina freed from the rectum just as the bladder was anteriorly. The utero sacral ligaments were incised near the sacrum. Now grasping the vagina with the angular Wertheim forceps, to prevent soiling of the peritoneum from any discharge from the uterus, the vagina was severed about one inch or more from the cervix. Now the peritoneum over the bladder was stitched to the upper margin of the vaginal incision and to the peritoneum of the posterior pelvic wall, and the incisions over the ureters were also closed. No enlarged glands were found in the pelvis, hence none were removed. Duration of the operation was one hour. Patient left the table with pulse of 120, which dropped to 80 within an hour after the operation. The stomach was washed before the patient left the table to prevent post-operative vomiting. You will note that this operation is accomplished with the ureters in full view, so that the excision may be broad and safe."

"In a case operated upon a few months ago the left ureter was involved at its vesical end. One and one-half inches of the ureter was excised, together with a piece of the bladder as large as a dollar. The bladder was closed and the ureter implanted after a method of my own. This method is so simple and quickly accomplished that I will describe it. An assistant carries a pointed forceps into the urethra and causes it to impinge upon the bladder wall. A small incision allows the forceps to penetrate the bladder and grasp the cut end of the ureter. A small incision in the axis of the ureter having been made to prevent stenosis, the ureter is drawn into the bladder a distance of about one-half inch. Now a few silk sutures and a peritoneal cuff holds the ureter in place while the half inch of ureter protruding into the bladder reestablishes the physiological valve-like closure of the ureter. The bladder should be fixed so that the act of vomiting or other abdominal strain will not tear the bladder from the ureter. I have done this implantation a number of times during the last eight years and verified its efficiency by cystoscopic examination."

Exhibition of Fibroid Specimens. Dr. Rosenthal also presented numerous fresh specimens of fibroids of the uterus. The first was a large nodular fibroid which simulated a malignant tumor because of torsion and adhesions. The fibroid had rotated upon the cervix as

a pedicle from left to right and became adherent in this position. Its nodular form and the pain and immobility caused it to simulate a malignant growth. It was removed with facility, however, the peritoneal adhesions being left with the bowels—otherwise the operation was quite typical. Operation four days ago—patient in good condition. The second was a small fibroid which had been causing continuous hemorrhage for some years. The patient's condition was such (almost moribund) that a preliminary curettage with carbolic cautery under mixed anesthesia was done. Six weeks later on return of the hemorrhage a hysterectomy was done. Operation four days ago; patient now in good condition. The third was a fibroid not large but retroverted and adherent, obstructing the bowel. Operation four days ago; patient's condition good. The fourth was a medium sized fibroid, removed because of hemorrhage and pelvic distress. Operation five days ago; patient in good condition.

Next specimen was a large Monolocular cyst. Weight 33 pounds. This was removed as in ordinary ovariectomy. Ovarian artery ligated on both sides of pedicle. Tumor excised and ligatures buried in broad ligaments with catgut sutures in peritoneum.

DISCUSSION:—Dr. M. F. Porter said that he wished to refer to Dr. Rosenthal's statement with reference to operation for cancer of the breast. The operation described is not the Kocher operation, though it may have been improved by Kocher. The operation originated in this country and the credit belongs to this country.

The latest and largest statistics concerning operations for carcinoma of the cervix uteri are those by Byrne, of Brooklyn, and they give better results by far in high amputation of the cervix for carcinoma than any other statistics show for any other method. When these cancers do recur they recur in the immediate neighborhood. They show first in the vagina and are most likely to return in the vagina. Dr. Porter said he would not consider a patient as cured if there had been no return in two or three years. He has had cases in which they recurred after five or six years, and carcinoma has been known to recur eight and nine years after operation. He said he wished to emphasize the difficulty of diagnosing the degree of malignancy. He said he had had a case which macroscopically gave every appearance of a cancer, and it was operated. The microscopic findings confirmed the diagnosis. The cancer returned and was pronounced by him inoperable. The case was turned over to the family physician who treated it by intra-vaginal x-ray exposures, through a speculum in the vagina, for a period of two years. The

case got well and has remained well up to the present time, and at least six or seven years have now elapsed. Some of these patients get well and some die, and it is difficult to tell which are the ultra-malignant and which less malignant.

In commenting on the cases exhibited by Dr. Stemen he said that for the proper manner of handling crushing injuries of the limbs so frequent in those in railroad service or workers with heavy machinery, the profession owes Dr. Stemen as much or more than any man in the profession. His long and extensive experience in dealing with this class of cases, and his well known conservative methods, have placed him at the top rank of those who are successful in handling this class of cases.

Dr. E. J. McOscar said he wished to agree with what had been said regarding the difficulty experienced in deciding as to the degree of malignancy of cancers of the uterus. With recurrence of the cancer after operation it is all important that x-ray treatment, if applicable, be adopted early if good results are to be secured. If the x-ray exposures are begun some time after the recurrence of the malignancy, good results are not usually secured.

Dr. B. Van Sweringen said he wished to commend Dr. Stemen for his conservatism in treating crushing injuries of the limbs. There could be no doubt but that the ordinary surgeon would have amputated in most of the cases presented, and the results secured forcibly illustrate the wisdom of conservatism. It sometimes seems as though the patient was being put to useless suffering and expenditure of time and money in an effort to save a limb that has been badly crushed and he said he thought the results secured in these cases showed the wisdom of following such a policy, and the patient should be gratified with the results.

Dr. S. H. Havice said that conservatism in surgery was worth cultivating. Surgeons often attempt too much, not only in an operative way but in a desire to properly clean and adapt lacerated parts. The "let alone policy" is a good one to pursue in a good many instances, but it usually takes a man of experience and ability to decide just when the "let alone policy" is the one to be followed.

Dr. L. P. Drayer said that he wished to commend the work of Dr. Rosenthal in presenting the demonstrations regarding the proper temperature as well as strength of saline solutions for transfusion. He also wanted to compliment Dr. Rhamy for his skill in preparing and mounting the beautiful microscopic slides from the melanotic sarcoma case reported by Dr. Bulson. He said that in his experience

it was one of the hardest things to get a microscopic slide of such a tumor as this which would show beautifully the pathological condition. Regarding the use of the x-ray in the treatment of malignancy he said that he thought many of the failures to secure results were brought about through faulty technique. He said he used to think he knew something about the use of the x-ray in the treatment of malignancy, and had had considerable experience with it, but he was willing to confess that he did not begin to know what he ought to know in order to secure the best results. The men who are really securing proper results from x-ray treatment are those who make a specialty of it and are learning by constant study and experience just how to do the work.

Dr. K. K. Wheelock said that the Society was indebted to the gentlemen on the program for having given such an interesting and profitable meeting. He said that he had attended many clinics in various cities, and had never seen any more interesting cases or any better presented than those of the evening. He complimented Dr. Bulson on the good results secured in the mastoid cases. He thought every man of experience had a way of his own for securing the best results. His method of operating mastoid cases was somewhat different than that of Dr. Bulson in that he preferred to close the external wound and continue the packing through the external auditory canal. He illustrated his method of operating by black-board drawings.

In closing the discussion Dr. Stemen said that he wished to thank the members for their complimentary remarks upon conservative surgery. He thought it possible for any good surgeon to secure equally as good results in the class of cases which he had presented, if good judgment was used in the treatment of the case and the over-zealous desire to operate was conquered.

Dr. Bulson in closing said that the mastoid cases were not presented with a view to pointing out any new method of operating, but to show the good effects of careful after-treatment in order to prevent disfigurement. He said he formerly operated these cases according to the plan suggested by Dr. Wheelock, but that whether it was due to faulty technique or some other cause, he had discovered that it resulted in deformity in some cases while in others, and especially where a large portion of the bony wall has been removed, it left an area of tissue which never properly epidermatized. He said the plan of keeping the wound open by loose dressing, and allowing the cavity to fill from the bottom, necessitated keeping the patient under

observation for several weeks, but it generally ended in results that amply repaid the surgeon and patient for the time and attention expended.

Dr. Rosenthal in closing said that he had no desire to take any credit from any American operator, but he believed that the so-called Kocher operation, as described by him, was a distinct advance over anything proposed in this country, even though the Kocher operation might be considered a modification of some other operation. He said he thought statistics were somewhat misleading, as the results secured are usually dependant largely upon the individual rather than upon the method.

At the conclusion of the meeting the members and guests enjoyed a smoker luncheon prepared and served by the nurses of the hospital.

SOCIETY PROCEEDINGS

Fort Wayne Medical Society.

Meeting of June 20, 1905.

Society called to order by President Drayer with thirty members and guests present. Minutes of previous meeting read and approved.

CLINICAL CASES.—Case 1: *Iodine in the Treatment of Infection.* Dr. G. W. McCaskey reported a case of infection of the leg successfully treated with one per cent. solution of iodine. He said he believed that we are warranted in following the suggestion of Senn in using iodine more as an antiseptic.

CASE 2. *The Importance of Bacteriological Examination of the Sputum in Pneumonia.* With reference to this subject Dr. G. W. McCaskey reported two cases which emphasized the importance of constantly examining the sputum bacteriologically with a view to determining any change in the character of the infection. In the first case a bacteriological examination of the sputum showed streptococci and no pneumococci. The case recovered. The second case was only seen two days ago, and four weeks previously began as an acute pneumonia. The initial symptoms were diarrhœa and vomiting, and twelve hours later rusty sputum appeared. The case ran the ordinary course for two weeks, and then there was an apparent crisis, but later chills and high fever, with irregular temperature set in. There has been no expectoration during the latter two weeks.

The leucocyte count showed 28,000, and the infection appeared to be streptococcic, but no sputum could be obtained to verify the diagnosis. This morning a specimen was obtained and in it was found the diplococcus. In looking over the literature on the subject Dr. McCaskey said he found cases on record where the pneumococcus takes on pyogenic properties and sets up putrefaction.

In discussing the last two cases Dr. A. P. Buchman asked if the crisis was really the crisis of a pneumonia, to which Dr. McCaskey said he doubted it, and thought that what had happened was that there was a mixed infection. Dr. Buchman said that he thought that the pneumonia was simply an incident occurring during the progress of the disease.

CASE 3. *Accidental Hemorrhage During Pregnancy.* This case was reported by Dr. B. Van Sweringen. The woman, eight months pregnant, was found bleeding per vagina, and lost a pint or more before the bleeding was checked. No further hemorrhage occurred until about the termination of the pregnancy when hemorrhage again appeared before the development of any pains. The hemorrhage was considerable, and fearing that it might be renewed and be serious in its character labor was instituted by rupturing the membranes. The labor was uneventful, the position being left occipito anterior. The placenta presented some peculiar features. The lower portion showed evidence of separation, and was the site of the hemorrhage. The placenta could not be felt per vagina. It was not a case of placenta previa. When the child was born there flowed from its nostrils a grumous bloody fluid. Evidently there had been an attempt at breathing or swallowing. The child developed a broncho-pneumonia from the blood inspired and died on the seventh day of its life. There had been no rise of temperature in the mother previous to the birth of the child, but subsequent to delivery there developed a severe sepsis which terminated nicely after attention to the uterus.

PAPERS. *Early Diagnosis of Pulmonary Tuberculosis* was the title of a paper read by Dr. B. P. Weaver, in which he presented a collection of recent data and opinions of those whose clinical experience had led them into a minute study of the disease. He discussed the question as to what may be considered an early diagnosis of the disease, and dwelt on the importance of making an early diagnosis, but the difficulty of making the same. He quoted opinions to show that to wait for the disintegration of the tubercle is too late in many cases. He spoke of the importance of the use of the microscope, and how even that aid does not give us evidence early enough. He referred

to the tuberculin test and the possibilities of its failure to establish diagnosis even in the presence of tuberculosis. The Roentgen rays confirms for us what physical examination has already discovered, but does not tell us anything that cannot be found out in other ways. He quoted opinions to show that the old and well tried methods (clinical history and physical examination) are still the best we have in the early diagnosis of pulmonary tuberculosis. (Dr. Weaver's paper appeared in full in the October number of the *Journal-Magazine*.)

Differential Diagnosis Between Typhoid and Tubercular Diseases was the title of a paper presented by Dr. J. S. Boyers, in which he gave the differences in the characteristics of the two diseases. He gave the difference in the symptomatology, such as the onset of the fever, condition of the pulse and respiration, the eruptions of the skin, the effects on the intestinal tract, and the results secured by the tuberculin test and the Widal reaction. His final conclusion was that notwithstanding various symptoms presented by the two diseases, at times it may be extremely difficult or even impossible in certain cases to say at the very time whether the case at hand is typhoid fever or acute miliary tuberculosis, and a little time must elapse to clear away doubts. (Dr. Boyer's paper appeared in full in the November *Journal-Magazine*.)

Genito-Urinary Tuberculosis. This paper was presented by Dr. H. O. Bruggeman. The speaker said that the disease might occur independently or secondarily to tuberculosis elsewhere. He spoke of the relation between the so-called genital tuberculosis, and that of the urinary passages, and discussed the paths of extension from the genital to the urinary and from the urinary to the genital systems. He said that there is no doubt that the blood stream is the chief path through which the infection is transmitted, though the infection may also travel by way of the lymph stream, and by direct extension from neighboring organs and tissues. Infection during coitus is also possible. He thoroughly discussed the subject of morbid anatomy, symptomatology, etc. He said that there are no signs or symptoms aside from the tubercle bacillus which are diagnostic. In treatment he emphasized the value of diet, fresh air and rest. Surgery aims to eradicate the focus of the disease. (Dr. Bruggeman's paper appeared in full in the October number of the *Journal-Magazine*.)

DISCUSSION:—Dr. B. Van Sweringen said, in regard to pulmonary tuberculosis, that more reliance can be placed on the physical signs than any other one manifestation. However, the ability to appre-

ciate the changes early by the usual methods depends a great deal upon the ability of the physician making the examination. He referred to the report of the committee composed of Drs. Osler, Billings, and others with reference to the interference with the expiratory murmur as a sign of early tuberculosis. The murmur is not so loud, somewhat muffled, and at times intensified. He said that in his personal experience he had come to rely more and more on the tuberculin test, and is in favor of ten milligrams as the initial dose. The test should be repeated with a view to eliminating the possibility of a co-incident rise of temperature from some other cause.

With reference to the differentiation between typhoid and tuberculosis he said he wanted to add two signs that he thought had been omitted in the paper. The sweating is usually present in tuberculosis and usually absent in typhoid. Herpes is usually absent in tuberculosis and usually present in typhoid.

In regard to tuberculosis of the genito-urinary tract he said that renal tuberculosis is sometimes manifested by vesicle symptoms. He reported a case of pulmonary tuberculosis in which the urethra had grown shut so as to admit only a small size sound, and this with very little infiltration. The urine was clear and no tubercle bacilli in the sediment.

Dr. G. W. McCaskey said, in speaking of tuberculosis, that the very nature of the disease makes it very difficult to recognize early. The symptoms are only developed when the disease has gone far enough to produce the changes that cause them, and the same holds good with the physical signs. The early diagnosis of pulmonary tuberculosis can hardly be looked for to come within the definite time as given by the essayist. The auscultatory signs are the earliest and most important we can recognize. He said he was a great believer in the tuberculin test, and considers it very reliable, but it will occasionally fail. He thought that to begin with ten milligrams is unsafe. He thinks the dose should begin with from two to three milligrams and then subsequently be increased. If there is an interval of four or five days between the injections, immunity will not occur. So far as the maximum dose is concerned he has given as high as 25 milligrams, but only after previously starting on the lower dose.

In the differential diagnosis between tuberculosis and typhoid, there is one factor that should be pushed more than it is, and that is the search for the organism causing the disease.

Dr. H. A. Duemling said that in the dead house he had noted the

frequency and high percentage of cases in which tubercle bacilli and tuberculous lesions are found in the dissecting material. On the use of the tuberculin test he said that inasmuch as the signs and symptoms had been occasioned by the filling up of the tissues with tuberculous products, it would seem that the tuberculin test is not usually used early enough in order to secure its aid as a diagnostic measure. He reported a genito-urinary case in which there was renal hemorrhage and a diagnosis of tuberculous kidney made. There was apparent recovery for two years, but the patient finally died from the effects of the disease. He has recently had a case of complete atresia of the vagina, tuberculous in nature, and the diagnosis was made largely because of the evidence presented by numerous scars along the sterno-cleido mastoid region.

Dr. A. P. Buchman said that he looked upon the tuberculin test as a confirmatory process, as we always have a suspicion before making the test. He said he believed that there is a pretubercular condition that is demonstrable and should be recognized.

Dr. M. F. Porter said that he had found in obtaining the family history there is frequently a mental condition manifesting itself in a belief that there is no tuberculosis in the patient or the family, and this in a number of cases has proved to be one of the early accompaniments of the disease. He thought very much reliance could be placed upon the history and physical signs when considered by thorough and painstaking observers.

Dr. L. P. Drayer said that considerable advances had been made in the recognition of the pretubercular stage, and that the blood studies by Dr. Holmes, of Denver, were worthy of consideration. He said that he believed that the auscultatory signs are the only ones that can be absolutely depended upon. He has used the tuberculin test about five hundred times in human beings and animals as a diagnostic agent, and is prepared to say that it is not devoid of danger. He said that he knew that an ordinary dose will sometimes kill a cow, and if it will kill a cow it will kill a human being. You cannot judge of the size of the lesion by the reaction secured. He has seen a marked reaction in a very small lesion. He said that he did not believe that Dr. J. B. Murphy comes up to his usual standard when he says that gonorrhœa is often a precursor of tuberculosis of the genito-urinary tract.

The amendment making the meetings of the Fort Wayne Medical Society weekly instead of once in two weeks was passed after having

been changed to read so that every fourth meeting is to be devoted to clinical cases.

The resolution asking the city authorities to enforce all laws with reference to the use of explosives on the Fourth of July was passed.

The usual bills were presented, and on motion allowed.

Adjourned.

J. C. WALLACE, Sec'y.

Meeting of September 12, 1905.

Society called to order by President Drayer with twenty members and guests present.

CLINICAL CASES. CASE 1:—*General Peritonitis from Perforation in the Ilium Due to Typhoid Fever* was reported by Dr. E. J. McOscar. Patient had been sick about one week and at work during the entire time, or until the Saturday preceding the Sunday when he was brought into the hospital in a condition of collapse. He complained of great pain in the abdomen. There was general rigidity of the muscles due to resistance. No localized tenderness. Temperature 95, pulse 150 and weak. Was given one quart of saline solution. On the following day the temperature was 101, and the patient restless and anxious. He was bathed with a cold sweat. The temperature rapidly increased to 107 and he died thirty hours after admission to the hospital. The post mortem showed general peritonitis from a perforation in the ilium due to typhoid.

In discussing the case Dr. Drayer said that the remarkable thing was the great range in temperature inside of twelve hours, 95 to 107.

Dr. Porter said that the temperature was the pre-mortem rise which might occur from any cause. He has seen many cases in which just prior to death the temperature has gone up from five to seven degrees.

CASE 2. *Further Report of the Case of Pneumonia Mentioned by Dr. McCaskey at the Preceding Meeting.* The speaker said that in the second case of pneumonia, reported in connection with his remarks on the importance of constant bacteriological examination of the sputum in pneumonia cases, he was able to give the conclusions. He said that at the time of the last meeting he had reported that the leucocyte count had showed 28,000 leucocytes, and the sputum showed the presence of the diplococcus. The next examination showed a leucocyte count of 10,000. The patient then improved for two days when he had another chill, the temperature subsequently running up to 106, and he died. No post mortem examination was

obtained. There evidently was a series of infectious foci in the lungs.

PAPERS:—*Differential Diagnosis of Chronic Diffuse Meningo Eucephalitis* was the title of a paper by Dr. Carl Schilling. The speaker said that this disease is associated with psychical, motor, and sensory disturbances, finally leading to dementia and paralysis. It occurs between the ages of thirty and sixty, and males are affected more frequently than females. It occurs in those who carry for many years great responsibilities, anxieties and troubles. Syphilis is also sometimes a factor, as also injuries. The disease is accompanied by disease in the vascular channels from inflammation and atrophic disturbances, followed by degeneration and atrophy of nerve cells. The disease is usually insidious in its onset. A change in the disposition of the patient is one of the first features, and this may be accompanied by mild motor disturbances, such as tremor of the tongue and lips and hesitancy in speaking. As the disease progresses the mental symptoms become more pronounced. Mental exultation or excitement, and even acute maniacal states are common. Epileptic seizures, even of the typical Jacksonian type, may occur. Paralysis, either monoplegic or hemiplegic, may follow these seizures, and this may be progressive. The recognition of the disease in its early stages is difficult. It is said that if an otherwise healthy man, in the prime of life and actively engaged in business affairs, suddenly loses all interest in his work, it should arouse a suspicion of the onset of the disease. The disease rarely ends in recovery. The only hope of permanent relief is in the cases following syphilis which should be placed upon large doses of iodide of potassium. Careful nursing and a quiet life are the only measures necessary in the majority of cases.

Focal Symptoms Commonly Present in Cerebral Neoplasms was the title of a paper by Dr. G. W. Mc Caskey. The speaker, using a plaster cast of the brain to illustrate his remarks, demonstrated various areas of the brain and called attention to the focal symptoms arising therefrom. Physiologists have been able to designate the various areas in the brain that are for certain purposes. Therefore it is easy to understand that lesions in those areas will produce certain definite manifestations. The focal symptoms may be divided into three classes, or psychical, motor and sensory. There is no doubt that the prefrontal lobe is the psychical area. Many cases have psychical phenomena, though the lesion is in the motor or sensory part of the brain, and the psychical phenomena are only secondary manifestations. The motor zone is divided into three parts, the upper controlling the leg and trunk, the middle the arm,

and the lower the face. A lesion in any of these parts may produce an irritative stage which will precede the stage of paralysis. The motor manifestations are very reliable in locating brain diseases. There are, however, sensory fibres in the motor area, and this seems borne out by the fact that with complete hemiplegia there is a certain amount of sensory paralysis. He briefly referred to the symptoms and lesions in aphasia, hemianopsia, and a variety of other motor and sensory disturbances. His remarks were further illustrated by blackboard drawings.

The Eye Signs of Cerebral Tumors was the title of a paper by Dr. S. H. Havice, in which he called attention to the diagnostic significance of disturbances in the visual field, retinitis, optic neuritis, or choked disc and optic atrophy.

In the discussion of all three papers Dr. M. F. Porter said that it would appear that certain portions of the brain seemed to be so useless that comparatively large quantities of brain tissue can be lost without apparent symptoms. He has seen many crushing injuries of the skull in which considerable quantities of brain tissue have been lost without apparently unfavorable effect on the patient. He has also seen cases in which a large abscess in the prefrontal area has produced but few symptoms. He asked for information as to whether the respiratory center had been definitely located in its entirety. In this connection he reported a case operated for a lesion of the brain in which just prior to operation the patient had suddenly lost consciousness and had stopped breathing, though the heart still continued to beat. The patient was kept alive all through the operation and for thirty hours afterward by artificial respiration. Whenever artificial respiration was stopped the patient made absolutely no effort to resume breathing by the natural way. The pulse continued good up to the time of death. The operation disclosed an abscess in the occipital region. Nothing, however, was found to account for the cessation of breathing. Dr. Porter said that many physicians hesitated to open the brain but he thought it was quite as good practice to explore not only the brain cavity but the spinal cord for lesions as it is to explore the abdominal cavity.

Dr. K. K. Wheelock said that frequently there were no focal symptoms which definitely point to the site of the lesion in the brain. In this connection he reported a case in which a boy who had several years previously received an injury to the head, suddenly complained of intense headache, but with no focal symptoms to point to the lesion. An existing suppurative ear trouble was thought to be the

cause, and he was operated with a view to removing diseased areas and relieving the pressure. The brain was exposed and a large amount of serous fluid evacuated, but without relieving the pressure symptoms. The patient suffered for several weeks and finally died, and on autopsy a tumor was found under the petrous portion of the bone, pressing on the medulla. There were evidences to show that the patient had probably received a fracture at the base of the skull. Outside of the ear symptoms there were no other manifestations to throw light on the case.

Dr. A. E. Bulson, Jr., said that he was inclined to doubt the diagnostic significance of the so-called focal symptoms of brain diseases in certain cases. In some cases with pronounced brain lesions there are no discoverable symptoms definitely pointing to the location and nature of the diseased process, while in other cases symptoms which are ordinarily considered as diagnostic evidence of brain lesion apparently occur without any such lesion. In this connection he reported one of his cases in which the patient had for several years suffered severely from frontal headache. The patient had been carefully examined by competent oculists, aurists, surgeons, gynecologists and internal medicine men without arriving at a diagnosis as to the nature of the trouble. There were no eye symptoms, or in fact any manifestations to definitely point to a brain lesion. The patient finally became suddenly unconscious, and in a few hours died. On postmortem a tumor the size of a walnut was found in the frontal lobe. He reported another case in which several years ago there was an unmistakable choked disc, the swelling amounting to four or five dioptries. A diagnosis of probable brain lesion, presumed to be neoplasm or abscess, was made. The condition has cleared up and the patient, so far as known, is now in good health and without any great amount of impairment of vision. The patient has had no particular treatment. He reported another case which he said he saw ten years ago, and in which he said a diagnosis of choked disc had been made by two or three others besides himself. The patient is now apparently well. He said that choked disc and optic neuritis are distinct entities and entirely different from each other, both in their appearance and signification. Early in the history of a neoplasm of the brain there may be enormous swelling of the optic disc, but later this swelling may entirely disappear, and the disc and retina appear fairly normal. In this connection he reported a case of brain tumor which he diagnosed from the eye manifestation, and which was seen by Dr. McCaskey. About a year later the choked

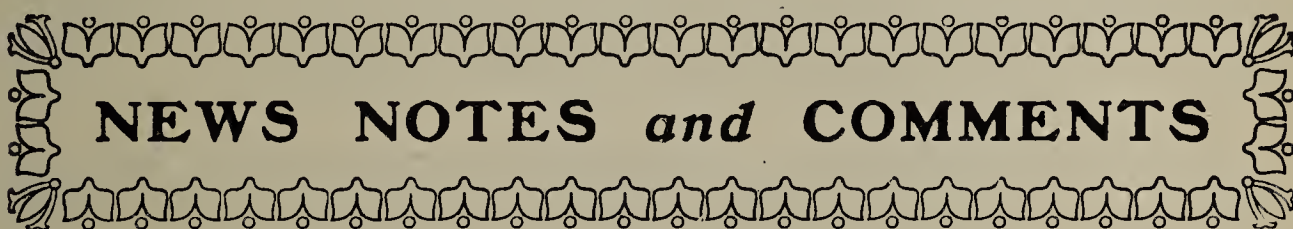
disc had practically disappeared, and the vision had improved. The patient died just as operation was to be performed by Dr. Porter. Autopsy showed that the diagnosis of brain tumor was correct.

Dr. McCaskey, in closing, said that he knew of no new facts that had been discovered with reference to the corticle center of respiration. He said that we must all recognize that symptoms are not always pathognomonic but they are at least significant when they occur repeatedly in certain cases. He said he had been associated with Dr. Bulson in the treatment of some of the cases referred to, and considered that they were somewhat exceptional but that he believed that further study would have disclosed significant manifestations.

The chair appointed a committee consisting of Drs. Porter, McCaskey and Stemen to prepare resolutions on the death of Dr. C. S. Williams, of Columbia City, a member of the Society.

Adjourned.

J. C. WALLACE, Sec'y.



NEWS NOTES *and* COMMENTS

NEW OFFICERS OF THE FORT WAYNE MEDICAL SOCIETY.—At the annual meeting of the Fort Wayne Medical Society, held Tuesday evening, December 6th, the following officers were elected: President, Dr. Maurice I. Rosenthal; Vice President, Dr. E. A. Crull; Secretary, Dr. J. C. Wallace; Treasurer, Dr. W. P. Whery.

NORTHERN TRI-STATE MEDICAL ASSOCIATION.—The mid-winter meeting of this association is to be held at Detroit, Michigan, on Tuesday, January 9th, 1906. The secretary announces that a very interesting program has been prepared and that the medical profession of Detroit will give those attending the meeting a cordial reception and generous social entertainment.

APPROVES THE WORK OF THE COUNCIL OF PHARMACY.—At the recent meeting of the Fort Wayne Medical Society the following resolution was passed:

“Resolved, That the Fort Wayne Medical Society approve of the appointment of the council of pharmacy by the American Medical

Association and of the efforts the members of that council are making to rid the country of those pharmacists and their products, which, while sailing under the ethical banner, are really doing business alike disgraceful and harmful, and that it also commend the editor of the *Journal of the American Medical Association* for the vigorous assistance he is giving the council."

FORT WAYNE PROFESSORS AT PURDUE.—In the coalition of all the medical colleges of the state to form the medical department of Purdue University, located at Indianapolis, several medical men formerly holding professorships in the Fort Wayne College of Medicine were tendered professorships in the new institution. For the most part the chairs are shared with men who held similar positions in the Indiana Medical College. The Fort Wayne men who have been given professorships, and the chairs filled, are as follows: Dr. M. F. Porter, Surgery; Dr. G. W. McCaskey, Clinical Medicine; Dr. W. O. Gross, Chemistry and Toxicology; Dr. C. B. Stemen, Accidental Surgery; Dr. W. W. Barnett, Osteology; Dr. Albert E. Bulson, Jr., Ophthalmology; Dr. K. K. Wheelock, Otology; Dr. L. P. Drayer, Pediatrics; Dr. B. Van Sweringen, Physical Diagnosis.

THE FORT WAYNE HOSPITAL.—This hospital, sometimes known as the Lutheran Hospital of Fort Wayne, is completing a large brick addition four stories in height which will greatly increase the capacity of the institution and the facilities for properly handling patients. The new addition contains a beautiful operating room with every convenient arrangement and requirement found in an up-to-date and efficient hospital. The hospital authorities have been fortunate in securing an able matron and efficient corps of trained nurses. The training school for nurses has already been started, and will prove of great value to the institution.

SANITARIUM FOR THE DRUG AND LIQUOR HABIT.—In the advertising pages of this number appears the announcement of Dr. R. Broughton, proprietor of the Broughton home for the treatment of drug and alcohol addictions, at Rockford, Ills. From the fact that so many quack institutions or "jag cure" hospitals have been established in various portions of the country, the majority of which are unworthy of the confidence of the medical profession, it is with pleasure that we recommend the Broughton home to the consideration of all medical men who desire to place their patients in the hands

of not only an ethical physician but one who is prepared by education and experience to treat such cases intelligently. In making this announcement we are not complying with any request or even suggestion that such a recommendation be given, and we only do so in the belief that our readers as a class will be pleased to know of a home for the treatment of drug and alcohol addiction which is worthy of their confidence.

Fort Wayne Personals.

Dr. C. E. Barnett is in Vienna devoting special attention to genito-urinary surgery.

Dr. H. O. Breuggeman has opened an office at 1820 Calhoun street. He was formerly assistant to Dr. J. M. Dinnen.

Dr. Albert E. Bulson, Jr., began his lectures on diseases of the eye, at the Indiana Medical College, the medical department of Purdue University, at Indianapolis, early in November.]

Dr. N. L. Deming, who has been in the east for several months on account of ill health, is reported as improving, and contemplating resuming his practice in Fort Wayne at an early date.

Dr. C. H. English has been made medical director of the new Lincoln Life Insurance Co., of Fort Wayne.

Drs. Wm. M. Enslen and Geo. B. Stemen were elected members of the city council of Fort Wayne at the last city election.

Dr. A. K. Hammond has had the distinction of being sued for alienating the affections of another man's wife, sued for divorce from his own wife, and married to the woman who was the object of his affections, all within the period of two weeks.

Dr. Maurice Harrod has recently moved into a fine new residence and office combined which he has completed at the corner of East Wayne and Hanna Streets.

Dr. G. W. McCaskey, in a paper read before the Academy of Medicine at Chicago in November, incidentally referred to the automobile as a valuable aid in the treatment of certain forms of nervous dyspepsia and neurasthenic conditions. Reporters for the Associated Press made capital of the remark, and heralded the statement, with additions and considerable embellishment, to the four corners of the country. Now Dr. McCaskey is being flooded with newspaper clippings from various cities making inquiry as to whether automobiles

are to be taken in capsules, powder, on toast, or some other way. He is also receiving inquiries from individuals as to the propriety of procuring automobiles for the cure of various forms of indigestion. The doctor is now wondering what would have happened if he had devoted even a paragraph to the idea which has been so erroneously accepted by the newspaper reporters as an item of news, and distorted and embellished to suit their fancies.

Dr. R. B. McKeeman has recovered from a severe attack of pneumonia.

Dr. J. E. Morse is in Chicago taking a post-graduate course.

Dr. M. F. Porter holds a surgical clinic at the city hospital at Indianapolis every two weeks as a part of his work in connection with his position as professor of surgery in the medical department of Purdue University.

Dr. B. W. Rhamy has established a well equipped medical and pathological laboratory at the corner of West Wayne and Calhoun Streets. He has been in great demand since opening his laboratory for pathological examinations.

Dr. Maurice I Rosenthal held a surgical clinic in Toledo at the November meeting of the Lucas County Medical Society.

Dr. Geo. A. Ross is now occupying his new residence just outside the city limits on the New Haven interurban road.

Dr. Albert E. Bulson Jr., presented a paper before the Chicago Ophthalmological Society on Tuesday evening, December 12th.

Dr. C. B. Stemen began his lectures on "Accidental Surgery" at the Indiana Medical College, the Medical Department of Purdue University, early in November.

In aspirating the chest, see to it that the syringe is in good condition before inserting the needle. Never apply the syringe to the needle after the latter has already been inserted; a severe pneumothorax may result. If the syringe is found to be out of order after the aspiration has been done, withdraw the needle also and reinsert.
—A. J. of S.

If a patient begins to vomit long after a radical operation for carcinoma of the stomach, do not jump to the conclusion that the cause is a local recurrence. It may be a metastasis in the brain.

MEDICAL **REVIEWS**

Department of Medicine and Therapeutics

In Charge of George W. McCaskey, A. M., M. D.
Professor of Clinical Medicine in the Fort Wayne College of Medicine, Ft. Wayne, Ind.

Gastric and Pancreatic Juice Enzymes.

J. C. Hemmeter, Baltimore (*Journal A. M. A.*, December 9), discusses the question of the identity of the enzymes of the gastric and pancreatic juices, reviewing and criticising the work of Pawlow and Parastschuk, who had pronounced in favor of such identity. While admitting the correctness of their technic and method of experimentation, he claims that their deductions therefrom are unsatisfactory. By the same method of using the parallelism of effects under various chemical and physical influences and the proportionality of work done, he says it would be possible to prove the identity of the ptyalin of the saliva and the trypsin of the pancreatic juice. The fact disclosed by persistent analysis of human gastric juices of the occasional absence of the milk-curdling enzyme while the proteolytic or peptic enzyme is still present, is quoted as evidence against their views. This occurs in certain pathologic conditions, but he has also observed it in two persons apparently normal as far as objective and subjective examination could show. Hemmeter says: "We had in these persons a demonstration of gastric juices: (1) That contained no free HCl, but combined HCl because they were capable of dissociating methyl acetate; (2) that could not coagulate milk; (3) that gave the biuret reaction with an Ewald test meal. The conclusion seems justifiable that pepsin was present, but that rennin or chymozin was absent, a conclusion which is difficult to harmonize with the view of Pawlow that the proteolytic and the milk-curdling effects are due to one and the same enzyme."

Fresh Air and Rest in the Treatment of Pulmonary Tuberculosis.

G. R. Pogue says that much harm has been done to consumptives by the indiscriminate prescribing of fresh air, out-door life, and exercise, without proper instructions and education of the patient, together with a consideration of the extent of the lesions present. It is folly to place a patient with high fever, chills, and sweats, outdoors all day long in cold weather and then require him to sleep in

an open tent with no provision made for the comforts of life to which he has been accustomed. On the other hand, the patient in the early stages of the disease who is told to adopt tent life, without being given definite instructions, is very apt to shut himself up tight at night in his tent, and so spends seven or eight hours a day in a closed canvas box. Patients must be kept outdoors all day long in the open air, and practically the same conditions must prevail at night, but they must be made comfortable, and be protected from cold winds, rains and storms, and, during the summer months, from the direct rays of the sun. The beginning of the outdoor life must be made gradual, without abrupt transition from the patient's usual mode of life. Similar fallacies exist in the minds of the laity, and even of the profession also, regarding the value of exercise. The patient who is told to live out of doors and "rough it" usually does not live long to carry out the injunction. Of sixty-two patients in various stages of the disease, whose histories are known to the author, who during the last five years have taken the "roughing it" cure, forty-three are dead and only two show signs of having their disease arrested. Rest is the element it is important to secure, for usually the patient is only too apt of his own accord to take too much active exercise.—*Medical Record*, December 9, 1905.

Uncertainties and Fallacies in Scientific Medicine.

Henry Bixby Hemenway draws attention to the fact that the modern tendency to depend on the newer laboratory aids to diagnosis, etc., has a bad effect in that it encourages physicians to devote less time to the study of their patients' personality. For example, pneumonia is much more fatal now than formerly, perhaps because the exponents of scientific medicine consider the disease to be but little influenced by treatment and so disregard the old-fashioned curative measures. In diphtheria antitoxin should not be used to the exclusion of all other treatment, and the advocates of modified milk feeding forget the differences in the nature of the milk of different breeds of cows. Those who insist in having all drinking water boiled often go to extremes, yet they are willing to eat salad, radishes, celery, and cress that are washed in the unboiled water. The fact that the germs of many diseases may at times be found in the mouths of healthy individuals shows that the presence of bacteria alone does not cause disease, and also proves the possibility of aborting incipient attacks. We shall therefore keep minds and eyes open to receive truth from every source.—*Medical Record*, December 9, 1905.

DEPARTMENT OF SURGERY GYNAECOLOGY *and* OBSTETRICS

In Charge of Miles F. Porter, A. M., M. D.
Professor of Surgery and Gynæcology in the Fort Wayne College of Medicine,

Regeneration of Nerves.

Perthes reports (*Deutsche Zeitschrift and Clin.*) a case of regeneration of the fifth nerve after the ganglion had been extirpated and various other resections done. Experiments made by him on dogs show that regeneration is almost certain to occur after nerve resection. His experiments further show that interposition of dentists filling between the ends of the divided nerve in the infraorbital canal prevents regeneration in the dog, and he recommends its use in man. [We have for some time had in mind the idea of filling the canal from which the nerve has been removed with parafin, but have not had an opportunity to put it to trial. With parafin the canal could be much more easily and quickly blocked, and, it would seem, quite a effectually.]—*Ed.*

Scopolamine As An Anesthetic.

H. C. Sharp, of Jeffersonville, writes upon the subject of scopolamine anesthesia (*New York Med. Jour.*, Nov. 25, 1905,) and reports in detail three cases in which he used the method. When used alone or with morphine it is too inconstant in effect. As advantages of this method of inducing anesthesia Sharp gives: (1) Harmlessness; (2) absence of excitement; (3) small amount of chloroform necessary. (Two drams were used in an operation lasting one hour and five minutes.) (4) Natural sleep after operation; (5) Absence of nausea and other ill effects that often follow chloroform and ether. (6) Deep, full, regular respiration; (7) Ability of patient to take food or water shortly after awakening without vomiting or nausea. He thinks scopolamine worthy of further investigation.

The Importance of the Early Recognition of Cancer of the Gastro-Intestinal Tract.

In a paper on Cancer of the Stomach read on October 19th, at the annual meeting of the New York State Medical Association, Dr. William J. Mayo emphasized several convincing facts, which we may thus summarize: (1) No single case is recorded of cancer of the

stomach in which non-surgical treatment has been of real benefit. However much may be accomplished with superficial carcinomata by methods other than radical removal, this only has been of real help in the treatment of the less accessible and more malignant cancer of the stomach. (2) The operative mortality of partial resection of the stomach has steadily fallen with improved technic and, in the hands of the Mayos, it is less than 10 per cent. (3) The statistics of Kocher, Mickulicz, the Mayos and others show prolongation of life in an encouraging percentage of cases for from two to five years, and, in a few cases, for even a longer time. (4) The lymphatic glands below the greater curvature of the stomach are limited to an area near the pylorus, and the lymphatics to the left of these drain towards them. The lymphatics of the lesser curvature lie in the wall of the stomach. In the hands of those expert in intestinal work the removal of the entire lesser curvature with a wide segment of the pyloric end of the stomach is not as formidable an operation as it appears. The resection can be made bloodless by the technic Mayo briefly described, and the shock of the operation further reduced by the withdrawal of the anesthetic,—for the manipulations of the stomach are not painful. (5) In arriving at a diagnosis, laboratory examinations,—of the gastric juice, the feces and the blood,—should be by no means neglected; but they are not as important as clinical evidences. The loss of free hydrochloric acid, the presence of lactic acid, the presence of blood in the gastric contents, are findings that must not be waited for before allowing the diagnosis of cancer. (6) The presence of a palpable mass must also not be demanded. As with the chemical signs, so this physical sign often appears only when the cancer has so far advanced that it is no longer amenable to removal. So, too, with the “Virchow’s gland,” often found in the supraclavicular region,—usually on the left side. (7) Persistent “indigestion” and progressive loss of weight, are sufficiently suspicious of the presence of cancer of the alimentary tract to demand explorative operation without waiting for any other evidences. The scales are the most important instrument in the diagnosis. (8) The practitioner must study the pathology of visceral cancer, not alone at the *autopsy post mortem*, but with the surgeon at the *autopsy in vivo*.

All of these teachings of Mayo were warmly and earnestly endorsed by Drs. John B. Deaver and Willy Meyer, who discussed the paper, by Dr. James P. Tuttle in his paper on Cancer of the Intestine, and by Dr. Arpad G. Gerster, who discussed Dr. Tuttle’s paper.

We believe that the sincere opinions expressed by these eminent surgeons upon this subject fairly mark the proper line of diagnostics and therapeusis and squarely put the responsibility up to the family physician. To him the problem should appear thus: Unfortunately, surgery holds forth the promise of an ultimate cure of gastrointestinal carcinoma to but a small number of cases. To a larger number it promises a comfortable existence for a few years. To any case it offers the only hope today of any amelioration. The earlier surgical aid is invoked the better for the patient. In many cases a positive diagnosis cannot be made until the condition is too far advanced for radical treatment. Therefore, a reasonable suspicion of the presence of a cancer in the stomach or intestine is sufficient indication for explorative operation.

Certain it is, that steady loss of weight without other demonstrable cause should lead the physician to look for a possible malignant visceral neoplasm. And certain it is that persistent "indigestion" due to some condition not positively ascertained, should be submitted, if not to surgical treatment, at least to surgical diagnosis.—*Amer. Jour. of Surg.*, November, 1905.

DEPARTMENT OF MATERIA MEDICA, THERAPEUTICS AND PEDIATRICS

In Charge of Budd Van Sweringen, M. D.
Professor of Theory and Practice of Medicine and Clinical Medicine in the Fort
Wayne College of Medicine.

Copper Salts in Actinomycosis and Blastomycosis.

In this paper, which he calls a preliminary report, A. D. Bevan, Chicago, (*Journal A. M. A.*, November 11), remarks that, while iodid of potassium has a very definite and positive effect on circumscribed lesions of actinomycosis, a very large proportion of the cases of abdominal and lung infection are fatal, in spite of the treatment. He has been looking, therefore, for some other method of treatment, and the well-known action of copper salts on vegetable parasites suggested their employment. Of these the most powerful is the sulphate which the French investigators have shown can be taken in doses of from 2 to 8 grains a day for a long period without deleterious results. He has used it in several cases in doses of from one-quarter to one-half a grain, in some cases increasing it to one grain

three times a day, also employing irrigation with a 1 per cent. solution. The results seemed so satisfactory that he has also used it in two cases of blastomycosis, the skin lesions of which are likewise benefited by iodid of potassium, especially in conjunction with the x-ray. A case of each of the two diseases thus treated with good results is reported. The treatment seems to him to be a logical one, and he thinks that collective further experimentation should be undertaken to determine the value of copper as a cure for these conditions. It is possible that, as in syphilis, a mixed treatment, using both copper and the iodids, would be most effective in some cases.

***The Treatment and Care of Advanced Cases of
Pulmonary Tuberculosis.***

S. A. Knopf regards as advanced those cases of pulmonary tuberculosis that can no longer be classified as incipient or early. The advanced cases are divided into ambulant and bed cases. The former are those who are most of the time without fever, and in whom the systemic disturbances are only a little more aggravated than in the early stage. These may be treated as incipient, with the one exception, that if there is not a satisfactory gain in weight they should be put at rest in bed or on the reclining chair, constantly exposed to the open air. The ambulant patients are the most frequent sources of infection, and the greatest care must be taken to train them to dispose of their sputum properly. Several plans for accomplishing this are described. The bed cases are subdivided into four classes, namely, sanatorium patients, hospital patients, home patients—well-to-do, living either in cities or country—and the consumptive poor, living in villages or in city tenements. It is a matter of great difficulty to find proper accommodations for such patients, as sanatoria are usually unwilling to receive cases that do not offer a favorable prognosis. The author outlines the essentials for the institutional treatment of such patients, and then describes a great number of plans for applying the fresh air principle in home treatment. One of the most serviceable of these, especially in dealing with the poor in cities, is a device invented by the author, and known as the window tent. The patient lies on a cot with his head beside the open window, to which is attached a sort of internal awning. This is arranged so that it shuts off the patient's head from the interior of the room, and permits the latter to be kept warm while the effect is the same as if the patient were entirely out of doors. The plan has many advantages, both from the practical and from the

medical standpoint. Other devices that are commended are Dr. Bull's Aerarium, and Dr. Kellogg's Porte d'Air. These are intended to serve the same purpose of permitting the patient to remain indoors, while at the same time he is enabled to receive fresh air as freely as if he were not in the house. The closing portion of the long and profusely illustrated paper is devoted to a consideration of the other hygienic and medicinal factors that must enter into the treatment, and many practical points are discussed for which reference must be made to the original.—*Medical Record*, November 18, 1905.

Surgical Complications of Pregnancy.

Appendicitis and ovarian and uterine tumors as surgical complications of pregnancy are discussed by F. D. Donoghue, Boston (*Journal A. M. A.*, November 25), and illustrative cases reported. He apparently favors home treatment in these conditions so far as possible, pointing out the dangers to the practice of the physician from what he calls the "hospital habit" that has been growing of late. His conclusions, in substance, are as follows: With the history of a well-marked attack of appendicitis in a young woman, operation should be performed as an antecedent to marriage. Well-marked acute symptoms, in pregnancy, referable to the right iliac fossa, call for operation at once. Marked discomfort in the same region, gradually increasing, calls for the same treatment. Operation should be advised before marriage when tumors of the uterus or appendages are known to exist, but if they are not recognized before pregnancy occurs, the treatment should be governed by the conditions existing in the individual case. At or near term an operation can be performed that will remove the condition and also permit the delivery of the child.

To prevent a suprapubic or other drainage tube from becoming displaced is easily accomplished by fitting another tube over it like a collar; this outer tube is split through half its length and the two portions are spread out over the skin and fastened down with adhesive plaster.—*A. J. of S.*

Never attempt to pack a bladder for hemorrhage without the aid of guy sutures; with them one can make absolutely sure that the gauze goes *into* the bladder, and not on top of it, pushing the organ away from the space of Retzius.—*A. J. of S.*

DEPARTMENT OF OPHTHALMOLOGY OTOLOGY, LARYNGOLOGY & RHINOLOGY

In Charge of Albert E. Bulson, Jr., B. S., M. D.

Oculist and Aurist for St. Vincent's Orphan Asylum, the Allen County Orphan Asylum and the U. S. Pension Bureau for Northern Indiana and Northern Ohio; Professor of Ophthalmology in the Fort Wayne College of Medicine, Fort Wayne, Indiana.

Tinnitus Aurium.

First reporting a case in which operation was contemplated, but not carried out on account of the improvement of the patient, W. S. Bryant, New York (*Journal A. M. A.*, December 9, discusses the propriety of dividing or destroying the auditory nerve trunk for the relief of specially severe cases of tinnitus when it can be determined that this nerve is the seat of the disturbance. He describes a method of procedure suggested by Dr. Carlton Flynt, which he has followed a number of times on the cadaver and which he considers has certain special advantages; he also reviews the reported cases, reproducing some of them in rather considerable detail. He has reached the following conclusions: "1. Carefully selected cases of tinnitus, with nerve stimulus located in the peripheral end of the auditory nerve, offer a good prognosis for cessation of the tinnitus after the section of the eighth nerve. 2. A technic which offers little inconvenience from hemorrhage, no danger from bony spicules and a minimum of evil from compression of the cerebrum, or especially of the cerebellum, gives a good prognosis of recovery from the operation and in selected cases a cessation of the tinnitus. 3. If, after appropriate general and local treatment, grave tinnitus still exists, we are called on to recommend the section of the auditory nerve, provided the source of the tinnitus is believed to lie in the peripheral portion of the auditory nerve. 4. Section of the acoustic nerve will be as effective for the cure of aural vertigo as for peripheral tinnitus."

On Certain Forms of Ocular Tuberculosis.

Charles Stedman Bull says that tuberculosis of the conjunctiva is much more often a primary disease, the result of an ectogenic infection, even in cases where tuberculosis has already developed elsewhere in the body, than of infection occurring through the blood. But, although tuberculous disease of the conjunctiva is not often secondary to tuberculous disease in other parts of the system, yet it is itself liable to be the starting point of general tuberculosis. An

intact normal conjunctiva can, however, never be infected. There must always be a loss of substance, usually a traumatic abrasion. Tuberculosis of the conjunctiva is more often secondary to nasal tuberculosis than primary. The symptomatology and treatment of tuberculosis in the various other anatomical regions of the eye are discussed in detail, and the author draws the following general conclusions: It is doubtful if any case of intraocular tuberculosis is ever a primary disease. In cases of doubt, or of very difficult diagnosis, the injection of tuberculin is an efficient aid to diagnosis. There is a general reaction in at least eighty-five per cent. of the cases, and some local reaction in about fifty per cent. of the cases. As a method of treatment, both the old and the new tuberculin have proved practically useless in the writer's experience. It is a remedy which needs careful watching. Surgical intervention in intraocular tuberculous conditions of the eye should seldom be done, unless there is considerable pain which tells on the patient's health, because the disease is not primary, and hence excision would remove only one focus of the disease.—*Medical Record*, December 9, 1905.

Sinus Thrombosis.

H. Hastings, Los Angeles, Cal. (*Journal A. M. A.*, November 18), reports two cases of sinus thrombosis which are of interest for the following reasons: In each case the thrombosis, though of otitic origin, was masked by the symptoms of other diseases, in one case by typhoid, and in the other by malaria. In neither case were the so-called classical symptoms, chills, sweats and fever present, and the suspicion of thrombosis was aroused in both by certain irregularities in the history which led to thorough examination of the sinus after the mastoid ablation. Hastings strongly advocates the examination of the sinus and emphasizes the danger of delay until the classical symptoms appear, since these are evidences of a late and dangerous state, viz., of septic disintegration. He has seen the sinus uncovered, purposely or unintentionally, 115 times in 198 consecutive mastoid operations without any bad result. He believes that terminating a mastoid operation in an old case, or when there is much mastoid destruction, without uncovering the sinus and making sure of its condition, is bad surgical practice.

After the open operation for varicocele the scrotum may be shortened by simply sewing the wound together transversely instead of longitudinally.—*A. J. of S.*



BOOK REVIEWS

International Clinics.—Vol. 3, 1905. J. B. Lippincott, Publishers, Philadelphia.

This volume of this well known publication contains six articles on treatment which should be worth its price alone. The one on the therapeutic uses of the Röntgen rays is profusely illustrated, showing the effect of this treatment in epitheliomata, sarcomata, lupus, scrofuloderma, etc.

In addition it contains five papers on medicine, four on surgical topics, two on neurology, one on syphilis, and five other papers on special subjects. They are all worth reading and preserving.

B. VAN S.

Pharmacopoeia of the United States.—Eighth Revision. P. Blackiston's Son & Company, Philadelphia.

We have before referred to this work, and we should like to call attention again to the necessity for the study of this book upon the part of all those who are engaged in prescribing or dispensing medicines. At least it should be accessible for ready reference.

B. VAN S.

A Practical Treatise on Nervous Exhaustion (Neurasthenia), Its Symptoms, Nature, Sequences, Treatment. By George M. Beard, A. M., M. D., Fellow of the New York Academy of Medicine; of the New York Academy of Sciences, Member of the American Medical Association, etc. Edited with Notes and Additions by A. D. Rockwell, A. M., M. D., Neurologist and Electro-Therapeutist to the Flushing Hospital; Professor of Electro-Therapeutics in the New York Post Graduate Medical School and Hospital, etc. Fifth edition—Enlarged. New York: E. B. Treat & Company, 241-243 West 23d Street. 1905.

The new addition of this classical manual of Dr. Beard is worthy of note. His acute observations on the phenomena of nervous fatigue disseminating and erecting a completely new clinical type of disease which will be substantially permanent as a group of symptoms whether recognized as a distinct disease or not, are memorable and historic. The subject matter of the book is familiar to the reading public and does not call for comment. The only thing new in the volume is a chapter added by the editor on the neuron theory, the precise position of which at the present time is somewhat problematical. He says in a prefared note that "The neuron theory, if true, will necessitate a radical revision of the physiology of nervous activity. Even if not susceptible of proof, it is, at least, a good

working hypothesis; and, therefore, in issuing a fifth edition of this work, I have thought it well to add a chapter devoted to this interesting and important topic." Within the compass of a dozen or fourteen pages he gives a substantially full account of this theory for all practical purposes, and this chapter undoubtedly adds value to the work.

G. W. McC.

Different Diagnosis and Treatment of Disease.

D. Appleton & Co. announce the appearance of this new book before the first of the year. The author is Augustus Caille, Fellow of the New York Academy of Medicine, Member and ex-President of the American Pediatric Society, Professor of Diseases of Children, New York Post-Graduate Medical School and Hospital, Visiting Physician to the New York Post-Graduate and German Hospitals, Consulting Physician to Isabella Home and Hospital, etc.

A System of Physiologic Therapeutics. A Practical Exposition of the Methods Other Than Drug Giving, Useful in the Prevention of Disease and in the Treatment of the Sick. Edited by Solomon Solis Cohen, A. M., M. D., Senior Assistant Professor of Clinical Medicine in Jefferson Medical College; Physician to the Jefferson Medical College Hospital, and the Philadelphia, Jewish, and Rush Hospitals; One Time Professor of Medicine and Therapeutics in The Philadelphia Polyclinic, etc. Volume V. Prophylaxis—Personal Hygiene—Care of the Sick. By Joseph McFarland, M. D., Professor of Pathology, Medico-Chirurgical College, Philadelphia; Henry Leffman, M. D., Professor of Chemistry in the Woman's Medical College, Philadelphia; Albert Abrams, A. M., M. D., (University of Heidelberg), formerly Professor of Pathology, Cooper Medical College, San Francisco; and W. Wayne Babcock, M. D., Lecturer of Pathology and Bacteriology, Medico Chirurgical College, Philadelphia. Illustrated.

Volume VI. Dietotherapy and Food in Health by Nathan S. Davis, Jr., A. M., M. D. Professor of the Principles and Practice of Medicine in Northwestern University Medical School; Physician to Mercy Hospital and Wesley Hospital, Chicago; Member American Medical Association, American Climatological Society, etc., Philadelphia. P. Blakiston's & Co., 1012 Walnut Street. 1902.

Volumes five and six of this notable work are devoted to prophylaxis, hygiene, alimentary therapeutics and dietetics. Volume five is said to contain "an epitome of what is essentially the natural history of medicine including the important facts thus far learned regarding the origin, dissemination and prevention of disease." This is certainly not a very modest claim, but the pretension is well sustained by the scope and excellent character of the work presented. The section of the origin and prevention of disease by Joseph McFarland and W. Wayne Babcock presents in an excellent form the important facts in this department of medical science. It includes a brief discussion of the metabolic perversions and products in their relation to morbid states, and then proceeds to discuss the physical

causes of disease including atmospheric and climatic conditions, and the important relation of vegetable parasites especially of the bacteria. The theories of immunity are well presented, and venereal diseases are considered in the relation to the public health, the important point being made with reference to syphilis that "marriage should not be considered for at least three years after the development of the initial lesion, or until two years have passed free from all symptoms, during the last six months of which probationary period no treatment should have been in progress." The neglect of this advice is responsible for many disastrous results of marriage.

Civic hygiene is well presented by Henry Leffman, and deals with the main facts concerning municipal water supplies, filtration, etc. This section is enriched by a series of excellent illustrations of filtering plants, especially illustrating the aseptic tank process of Manchester.

Domestic and personal hygiene is discussed by Albert Abrams, and includes an excellent chapter on special nursing which can be read to advantage by many physicians as well as nurses.

The volume on alimentary therapeutics and dietetics (volume six of the series) is written by N. S. Davis, and gives a very full and satisfactory exposition of this very important subject. He first discusses the general principles of diet including the physiological questions involved in the use of water in too large as well as too small quantities, the former being too little appreciated. The whole subject of dietetics rests upon a scientific basis, the principles of which should be thoroughly understood by everyone who wishes to intelligently prescribe suitable diets in different forms of disease. This is one of the best manuals with which the writer is acquainted for securing this information, and is cordially recommended to medical men. The different types of disease are considered individually, and the principles which should guide us in the solution of diet both as to quantity and quality clearly presented. G. W. McC.

In performing paracentesis in the median line for abdominal fluid, be sure that the bladder is empty. When it is necessary to perform paracentesis in the lateral part of the abdomen, be careful to avoid the deep epigastric artery.—*A. J. of S.*

Very extensive and rapidly spreading subcutaneous infections may result after an aspiration of a foul-smelling empyema. It is therefore wise to always operate over the site of aspiration, and especially to see that the puncture wound is well drained.—*A. J. of S.*

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MISCELLANEOUS SELECTIONS

Choera and Anemia.

In the etiology of chorea nothing is noted relative to anemia. It is simply accounted as an accompanying symptom of the condition. Medical literature emphasizes the relation between rheumatism and chorea, with anemia as an important symptom. After observation of several cases I am strongly of opinion, however, that anemia as a causative factor is worthy of investigation.

Anemia of toxic origin presents pathological conditions which favor the production of choreic affections. It is true that simple anemia is, as a rule, of secondary origin, and, viewed in this light, it may be argued that if chorea arises, it is the result of the primary and not of the secondary conditions—thus agreeing with the admitted etiology. This argument, however, will not satisfactorily explain those cases of chorea which arise remotely from the primary condition, but recently from the secondary effects.

I submit three cases in which symptoms, treatment, and recovery seem to intimate at least a possible relation between anemia and chorea.

CASE 1. A female child of eight years gave a history of typhoid fever eight months prior to my visit. According to the mother's statement the child had made a quick and good recovery, gaining rapidly in weight and exhibiting the energy of her former life. Six months later she became irritable and pale, with pain in her arms and legs, which condition was soon followed by gastric disorders and irregular spasms of the muscles of the face. Simple anemia was in evidence from objective and subjective symptoms alone, but was unquestioned in the light of the results obtained from blood examination—the red blood element being present to the extent of barely 3,000,000 red corpuscles per c. m.

This case was treated with two teaspoonfuls of pepto-mangan (Gude) and two drops of Fowler's solution, three times a day. After gastric symptoms had abated somewhat, two raw eggs per day were added to the diet. The patient was discharged in five weeks, completely recovered.

CASE 2. A female child of ten years of age gave history of malaria (a well-defined case of intermittent fever) one year previously. The pallid condition of the child induced the mother to solicit my aid. Upon examination I found slight choreic movements which had escaped the mother's eye, though she did admit that the child "could not sit still very long at a time," and "was constantly working her

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TO THE

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FOR THE YEAR 1905

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